Background Information and Technical Support Document
For Proposed Adoption of

310 CMR 7.32
Massachusetts Clean Air Interstate Rule
(Mass CAIR)

and amendments to

310 CMR 7.28
NO_x Allowance Trading Program

Regulatory Authority:
M.G.L. c. 111, Sections 142A through 142M

January 2007

TABLE OF CONTENTS

I. INTRODUCTION[1]

The Massachusetts Department of Environmental Protection (MassDEP) is proposing to adopt the Massachusetts Clear Air Interstate Rule (Mass CAIR), 310 Code of Massachusetts Regulations (CMR) 7.32, to meet the requirements of the federal Clean Air Interstate Rule (federal CAIR) promulgated by the United States Environmental Protection Agency (EPA) on May 12, 2005 (70 FR 25317). The federal CAIR requires states in the Eastern U.S. to reduce emissions of nitrogen oxides (NO_x) and sulfur dioxide (SO_2) that significantly contribute to fine particle ($PM_{2.5}$) and ground-level ozone pollution problems in downwind states. Reducing these emissions will help States meet the National Ambient Air Quality Standards (NAAQS) for ozone and $PM_{2.5}$. EPA found that Massachusetts contributes only to downwind ozone problems (but not $PM_{2.5}$ problems); therefore, Massachusetts is required by federal CAIR to reduce ozone season NO_x emissions only.

The proposed Mass CAIR caps ozone season NO_x emissions from large fossil-fuel-fired electricity and steam generators located in Massachusetts in order to address the interstate transport of NO_x from Massachusetts sources to other states. Mass CAIR will replace the existing NO_x Allowance Trading Program (310 CMR 7.28), which has capped ozone-season NO_x emissions from these sources since 2003, but at a less stringent cap.

With the federal CAIR, EPA also issued a CAIR Model Rule that States can use to achieve the CAIR-required reductions. The Model Rule establishes a cap-and-trade program covering large electricity generators. While Mass CAIR incorporates most of the Model Rule provisions (See Appendix A - Comparison of Proposed Mass CAIR to Model Rule), it also includes State-specific provisions that differ from the Model Rule for certain program elements where EPA has granted flexibility to the States. More specifically, the proposed Mass CAIR differs from the Model Rule as Mass CAIR:

- Applies to certain sources that are not included in the Model Rule, but that are included in the existing Massachusetts NO_x Allowance Trading Program (310 CMR 7.28).
- Sets aside 5% of the State NO_x budget for new units.
- Sets aside 5% of the State budget in a Public Benefit Set-aside (PBSA) to encourage energy efficiency and renewable energy projects.
- Uses an output-based allocation procedure that is updated annually.
- Does not provide for voluntary opt-in of additional source sectors.

[1] This document uses the following nomenclature conventions:

- the Clean Air Interstate Rule is referred to as the federal CAIR;
- the model rule established by the federal Clean Air Interstate Rule is referred to as the Model Rule;
- the proposed Massachusetts Clean Air Interstate Rule is referred to as Mass CAIR;
- units that meet MassDEP's existing NO_x Allowance Trading Program applicability criteria, but not the Model Rule applicability criteria, is referred to as non-Model Rule units.

MassDEP is planning to revise the Massachusetts State Implementation Plan (SIP) for ozone by incorporating the Mass CAIR regulation into the SIP by March 31, 2007 to avoid implementation of the federal program.

II. BACKGROUND and PURPOSE OF PROPOSED RULE

A. The Clean Air Interstate Rule (CAIR) and How it Applies to Massachusetts

In the federal CAIR, EPA determined that 28 States and the District of Columbia contribute significantly to other States' non-attainment of the National Ambient Air Quality Standards (NAAQS) for particulate matter 2.5 micrometers in diameter and smaller ($PM_{2.5}$) and/or for ozone. The federal CAIR requires those 28 States and the District of Columbia to revise their SIPs to adopt control measures that will address their contribution to downwind non-attainment of the ozone and $PM_{2.5}$ standards.

EPA determined the amount of annual and/or seasonal emission reductions that each State must achieve to address transport. This determination is based on EPA's estimate of what constitutes "highly cost effective" reductions from large electric generating units (EGUs) that produce electricity for sale, burn any amount of fossil fuel, and serve a generator with a nameplate capacity greater than 25 megawatts (MW). The federal CAIR set a 2-phase declining cap for annual emissions of NO_x and sulfur dioxide (SO_2) in States that contribute to $PM_{2.5}$ non-attainment, and a 2-phase declining cap for ozone season NO_x emissions for States that contribute to ozone non-attainment as follows:

- Phase I NO_x cap for annual and ozone season[2] emissions: 2009 - 2014
- Phase II NO_x cap for annual and ozone season emissions: 2015 and thereafter
- Phase I SO_2 cap for annual emissions: 2010 - 2014
- Phase II SO_2 cap for annual emissions: 2015 and thereafter

Massachusetts is in moderate non-attainment of the health-based ozone NAAQS, and was found to contribute to non-attainment of the ozone NAAQS in Rhode Island and Connecticut. Meanwhile, Massachusetts was designated unclassifiable/attainment for the health-based $PM_{2.5}$ NAAQS, and was found to not contribute to non-attainment of the $PM_{2.5}$ NAAQS in any State. Therefore, Massachusetts is only subject to the federal CAIR cap for ozone season NO_x emissions. The federal CAIR Ozone Season NO_x Budget for Massachusetts is:

- 2009 – 2014: 7,551 tons
- 2015 and beyond: 6,293 tons

This budget is a substantial decrease from the Massachusetts budget under the existing NO_x Allowance Trading Program of 12,861 tons of NO_x. Because EPA used a fuel-adjusted heat input methodology to determine state budgets, the amount of NO_x reduction

[2] The ozone season is defined as May 1 to September 30 of each year.

required for affected states is not proportional across the CAIR region. EPA multiplied average heat input from 1999 to 2002 by fuel-adjustment factors of: 1.0 for coal, 0.6 for oil and 0.4 for gas. This methodology tends to reward electricity generation by dirtier and less efficient units.

The Model Rule[3] establishes a cap-and-trade program for EGUs as a means of implementing the required reductions in each State. States are obligated to achieve their federal CAIR caps; however, States are not obligated to achieve their reductions from EGUs, nor are they obligated to adopt and implement the Model Rule. States may achieve the reductions by imposing stack-specific emission standards on EGUs (rather than a cap-and-trade program) or by reducing emissions by an equivalent amount from other sources. However, if a State wants its EGUs to participate in the federal CAIR multi-state cap-and-trade program, it must adopt the Model Rule in its CAIR SIP.

MassDEP believes that EGUs and other affected sources in Massachusetts should be able to participate in a multi-state cap-and-trade program. Therefore, MassDEP proposes to adopt an ozone season NO_x cap-and-trade program that incorporates the Model Rule in part. The Model Rule sets program parameters for the cap-and-trade program including: establishing allowance trading accounts; issuing CAIR permits; and monitoring and reporting by sources. Under federal CAIR, States have limited flexibility to adopt provisions that differ from the Model Rule. MassDEP proposes to tailor its program to take advantage of that flexibility and is proposing to adopt provisions, described in detail in Section III, that:

- include units in Mass CAIR that do not otherwise meet Model Rule applicability criteria and adjust the cap accordingly; and
- adopt a NO_x allocation methodology that differs from the Model Rule.

The federal CAIR originally required that States file with EPA SIPs addressing federal CAIR requirements by September 2006. However, on April 28, 2006, EPA published in the Federal Register (71 FR 25328) a Federal Implementation Plan (FIP)[4] that would implement the federal CAIR program if States do not submit SIPs. The FIP gives States the option of filing a full SIP by September 11, 2006 or filing an "abbreviated SIP" by March 31, 2007 that may include State-specific provisions but otherwise adopts the Model Rule. MassDEP intends to meet the March 31, 2007 deadline. Once EPA approves a State SIP submittal, the FIP will be withdrawn and the program will be implemented under the State regulation.

If a State does not file a CAIR SIP, EPA will administer the CAIR program in the State pursuant to the FIP and will allocate CAIR NO_x Ozone Season allowances to State facilities pursuant to the Model Rule allocation methodology. In a Notice of Data Availability (NODA) published in the Federal Register on August 4, 2006 (71 FR

[3] Please note the nomenclature conventions in footnote 1, at the bottom of page 3.
[4] EPA's rationale for issuance of the FIP prior to the September 2006 deadline for State CAIR SIPs is that states failed to submit SIPs to address interstate transport following EPA's adoption of the ozone and $PM_{2.5}$ standards in 1997 and that the FIP will insure that CAIR reductions occur according to EPA's timeframe.

44283), EPA provided facility-specific allocations for 2009 through 2014 that would apply if a State does not file a State SIP.[5] However, EPA will not record 2009 CAIR NO_x Ozone Season allowances in facility accounts until October 2007, giving States time to submit and have their SIPs approved by EPA before EPA allocates allowances. In the case of an approved State SIP, EPA will allocate 2009 CAIR NO_x Ozone Season allowances pursuant to the State regulation, rather than the Model Rule.

B. Existing NO_x Allowance Trading Program

In 1999, MassDEP promulgated the NO_x Allowance Trading Program, 310 CMR 7.28, to fulfill its obligations under EPA's NO_x SIP Call (63 FR 61712, October 10, 1997), and its commitments under the Ozone Transport Commission (OTC) NO_x Memorandum of Understanding (MOU).[6] The NO_x Allowance Trading Program set an ozone season cap on NO_x emissions from certain sources of 12,861 tons beginning in 2003.[7] In 2004, MassDEP amended the NO_x Allowance Trading Program to include a Public Benefit Set-aside (PBSA) program to encourage Energy Efficiency Projects (EEPs) and Renewable Energy Projects (REPs).[8]

As of 2009, EPA will no longer administer cap-and-trade programs adopted under the NO_x SIP Call Rule. Therefore, MassDEP is proposing Mass CAIR to replace the existing NO_x Allowance Trading Program starting in 2009. Because MassDEP has based Mass CAIR on the Model Rule, EPA will administer the program.

The proposed Mass CAIR is very similar to the existing NOx Allowance Trading Program and will cover all of the same facilities. While most of the NO_x Allowance Trading Program elements are unchanged in the proposed Mass CAIR, MassDEP is proposing certain changes, particularly with respect to the dates by which facilities must take action under the Mass CAIR. These changes are discussed in detail in the following Section.

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[5] These allocations can be found at: http://www.epa.gov/airmarkets/cair/noda/index.html.

[6] The OTC NO_x MOU was adopted in 1994, and established a multi-phased program to reduce NOx emissions from large fossil-fuel-fired boilers and indirect heat exchangers through a regional allowance trading program.

[7] For more information on 310 CMR 7.28, see the July, 1999 *Background Document and Technical Support for Public Hearings on Proposed Revisions to the State Implementation Plan For Ozone: Response to the "NO_x SIP Call" and the "OTC NO_x MOU," Including Amendments To 310 CMR 7.00 Et Seq.: 310 CMR 7.19 "RACT for Sources of Oxides of Nitrogen," 310 CMR 7.27 "NO_x Allowance Program," and 310 CMR 7.28 "NOx Allowance Trading Program,"* (http://mass.gov/dep/air/priorities/deptsd.doc and http://mass.gov/dep/air/priorities/tsdsup.doc) as well as the *Summary of Comments and Response to Comments from Public Hearings on Proposed Revisions to the State Implementation Plan for Ozone, Including Proposed 310 CMR 7.28* (http://www.mass.gov/dep/air/community/728rtc.pdf).

[8] For more information on the PBSA program, see the March 26, 2003 *Background Document and Technical Support For Public Hearings on Proposed Amendments to 310 CMR 7.00 Et Seq.: 310 CMR 7.28 "NO_x Allowance Trading Program"* (http://www.mass.gov/dep/air/laws/backgrnd.doc) and June 2004 *Summary of Comments and Response to Comments on Proposed Amendments to 310 CMR 7.28 NO_x Allowance Trading Program to establish the Public Benefit Set-Aside Allocation Process and Proposed Revisions to the State Implementation Plan for Ozone* (http://www.mass.gov/dep/air/laws/pbsartc.doc).

III. Description of the Proposed Mass CAIR

A. Inclusion of NO_x Allowance Trading Program Units

General Applicability

The Model Rule applies to large electric generating units (EGUs), generally defined as units that burn any amount of fossil fuel[9] and serve generators with nameplate capacities greater than 25 MW that produce electricity for sale. MassDEP's existing NO_x Allowance Trading Program applies to units that burn more than 50% fossil fuel and have a maximum heat input capacity of 250 million British thermal units (MMBtu) or more, or serve a generator with a nameplate capacity of 15 MW or more. Units are included in the NO_x Allowance Trading Program whether or not they produce electricity for sale.

The Model Rule's applicability criteria exclude a number of Massachusetts units that are in the NO_x Allowance Trading Program. However, the federal CAIR requires that a State maintain all emission reductions achieved pursuant to its response to the NO_x SIP Call. States can maintain those reductions in whatever manner they choose, including bringing the non-Model Rule sources into their State CAIR program.[10]

MassDEP is proposing to include in the State CAIR program all facilities included in its existing NO_x Allowance Trading Program (listed in Table 1). If these sources are included in a State CAIR, a State must include all such sources in CAIR, and cannot include only certain sources (for example, only the largest emitters). EPA allows the State to increase its CAIR budget to account for the emissions from the additional sources.

[9] Except that Municipal Waste Combustors must burn 20% or more fossil fuel to meet the Model Rule applicability criteria.

[10] Alternatively, MassDEP could impose equivalent Reasonable Available Control Technology (RACT) requirements on the sources, or obtain equivalent emission reductions from another source category.

Table 1. Units that MassDEP proposes to include in Mass CAIR that are not included under federal CAIR (referred to as non-Model Rule units or sources)

Station	Units	ORIS Code
Blackstone Street	11 & 12	1594
Doreen	10	1631
Framingham	FJ1-3	1586
GE Aircraft Engines Lynn	3 & 5	10029
Kendall Square	S6	1595
MIT	1	54907
MWRA - Deer Island	S42 & S43	10823
Mystic	MJ-1	1588
New Boston	NBJ-1	1589
Peabody - Waters River	1	1678
Somerset	11	1613
Trigen - Kneeland St.	K1-4	880023
West Springfield	10	1642
Woodland	10	1643

Other Applicability Issues

Biomass Units

MassDEP is proposing to include sources that meet the applicability criteria of the Model Rule and the NO_x Allowance Trading Program in Mass CAIR. However, MassDEP cannot modify either applicability criteria in Mass CAIR. The Model Rule includes biomass units that meet the Model Rule applicability criteria; i.e., serve a generator with a nameplate capacity of greater than 25 MW and burn any amount of fossil fuel (including fossil fuel combusted during start-up procedures). In contrast, MassDEP's existing NO_x Allowance Trading Program only includes units (including biomass units) if they burn more than 50% fossil fuel and have a maximum heat input capacity of 250 million British thermal units (MMBtu) or more or serve a generator with a nameplate capacity of 15 MW or more. The result of including both applicability criteria is that biomass units serving generators with nameplate capacities greater than 25 MW and that burn any amount of fossil fuel (i.e., that meet the Model Rule applicability criteria) would be included in Mass CAIR. In addition, biomass units that combust more than 50% fossil fuel and serve generators between 15 MW and 25 MW and biomass units that combust more than 50 % fossil fuel with maximum heat input capacities of 250 MMBtu or greater (assuming that they do not serve a generator with a nameplate capacity greater than 25 MW), would be included in Mass CAIR. MassDEP is not aware of any biomass units in Massachusetts that would be included in the proposed Mass CAIR based on these applicability criteria.

Cogeneration Units

MassDEP is proposing to include sources that meet the applicability criteria of the Model Rule and the NO_x Allowance Trading Program in Mass CAIR. However, MassDEP cannot modify either applicability criteria in Mass CAIR. The Model Rule exempts cogeneration units from the cap-and-trade program if they meet certain efficiency standards and sell no more than one-third of their potential electrical output capacity to the grid, or sell no more than 219,000 megawatt hours (MWh), whichever is greater. Since MassDEP's existing NO_x Allowance Trading Program does not have a cogeneration exemption, cogeneration units, like any other unit, are only exempted if they burn 50% or less fossil fuel. The result of including both applicability criteria is that any cogeneration unit that meets the existing NO_x Allowance Trading Program criteria would be included in Mass CAIR and would not be exempt. Therefore, only cogeneration units that burn no more than 50% fossil fuel would be exempt, provided they meet the other Model Rule cogeneration exemption criteria noted above (i.e., meet certain efficiency standards, etc.). At this time, MassDEP is not aware of any units that would qualify for a cogeneration exemption under the proposed Mass CAIR.

B. The Mass CAIR Budget

As noted above under "General Applicability," MassDEP proposes to include in the Mass CAIR program all facilities included in its existing NO_x Allowance Trading Program (listed in Table 1). EPA allows a State to increase its CAIR budget to account for the emissions from these additional sources but has not prescribed a methodology for determining the amount by which the budget should be increased. MassDEP proposes to request that EPA increase the federal CAIR ozone season budget for Massachusetts by 362 tons for Phases I and II to account for inclusion of the non-Model Rule units listed in Table 1.[11]

The proposed budget expansion of 362 tons equals the second lowest total ozone season allocation of allowances made under the NO_x Allowance Trading Program during the 2003 to 2008 period to these units (see Table 2). MassDEP believes that basing the budget increase on the second lowest ozone season allocation (out of six years) balances environmental protection with the needs of industry.

[11] Units listed in Table 1 met the NO_x Allowance Trading Program applicability criteria, but not the Model Rule applicability criteria, during the 1999-2002 period used by EPA to determine state trading budgets under the federal CAIR.

Table 2. Calculated Mass CAIR budget increase to account for non-Model Rule units[12,13,14,15]

Plant ID (ORIS)	Plant Name	NOx Allowance Allocations					
		2003	2004	2005	2006	2007	2008
1594	Blackstone Street	23	5.41	5.51	7.66	10.94	14.51
1631	Doreen	1	0.49	0.47	0.17	0.20	0.14
1586	Framingham	1	0.58	0.50	0.91	0.98	1.05
10029	GE	60	60.00	60.00	46.49	39.00	30.87
1595	Kendal Square, Jet	NA	NA	NA	0.91	0.96	1.03
54907	MIT	96	89.94	105.01	109.30	113.53	131.96
10823	MWRA - Deer Island	37	37	37	0.9	0.92	0.63
1588	Mystic, Jet	NA	0.15	0.12	0.14	0.13	0.14
1589	New Boston, Jet	NA	0.41	0.31	0.28	0.25	0.23
1678	Peabody - Waters River, Unit 1	0	0	0	2.67	2.38	1.37
10176	South Boston Combustion Turbines	6	6	6	1.38	1.22	0.75
1613	Somerset - Jet 11	NA	0.61	0.56	0.51	0.45	0.3
880023	Trigen - Kneeland St. Station	232	215.96	213.63	189.88	175.05	187.50
1642	West Springfield, Jet	NA	0.68	0.78	0.44	0.40	0.25
1643	Woodland	1	0.57	0.51	0.14	0.11	0.09
	MA TOTALS:	**457.00**	**417.80**	**430.40**	**361.78**	**346.52**	**370.82**

NA - data not readily available and not relevant to the determination of the Mass CAIR budget increase because 2003, 2004, and 2005 would not be the second lowest ozone season total allocation.

[12] Primarily due to calculation errors, eighteen facilities received fewer allowances for the 2004 to 2007 control periods of the NO_x Allowance Trading Program than they should have received. MassDEP addressed this by revising 310 CMR 7.28(6)(b)4. in November 2004 to allocate NO_x allowances from the Public Benefit Set-aside account to the eighteen facilities. Other units were over-allocated from 2004 to 2007 due to these errors. MassDEP proposes to use the number of allowances that should have been allocated from 2004 through 2008 to determine the appropriate CAIR budget increase, not the number of allowances that were allocated in error from 2004 to 2007.

[13] MBTA (South Boston Combustion Turbines; ORIS – 10176) is an unusual facility as it currently meets federal CAIR Model Rule applicability criteria, but did not during the years evaluated by EPA for establishing State budgets, since it first received payment for selling electricity to the grid in 2006.

[14] 2003 Allocations listed in promulgated NOx Allowance Trading Program (7.28) regulation, November 1999.

[15] Unrounded allocations are listed for 2004 to 2008. As allowances are only issued in whole tons, unit-level allocations (shown above) are summed at the facility level and then rounded.

Table 3. Proposed Mass CAIR State Trading Budget Apportionment

	Federal CAIR Budget		Budget Increase		Mass CAIR Budget (total)
2009-2014	7551	+	362	=	7913
2015 & beyond	6293		362		6655

	Public Benefit Set-aside	New Unit Set-aside	Allowances for Existing Units
2009-2014	396	396	7121
2015 & beyond	333	333	5989

C. New Unit and Public Benefit Set-asides

The existing NO_x Allowance Trading Program includes a Public Benefit Set-aside (PBSA) and a New Unit Set-aside, each of which is 5% of the total State budget. MassDEP proposes to include both a 5% PBSA and a 5% New Unit Set-aside in Mass CAIR.

PBSA

The PBSA was established under the NO_x Allowance Trading Program to encourage Energy Efficiency Projects (EEPs) and Renewable Energy Projects (REPs).[16] This set-aside allows MassDEP to annually allocate to proponents of EEPs and REPs a limited number of NO_x allowances for that control period based on the energy saved by EEPs and the energy generated by REPs. While the Model Rule does not provide for a PBSA, MassDEP proposes to include this provision in Mass CAIR because of the importance of providing incentives for EEPs and REPs. Under the NO_x Allowance Trading Program, the PBSA is set at 5% of the state budget, or 643 tons. Because this set-aside was fully subscribed in 2005 and 2006, MassDEP proposes to keep the PBSA at 5% of the Phase I and Phase II state budgets in Mass CAIR. If the state budget is expanded to include all units in the NO_x Allowance Trading Program as proposed (see discussion under "MA CAIR Rule Proposed Budget"), then the PBSA will be 396 tons in Phase I of Mass CAIR (2009-2014), and 333 tons in Phase II of Mass CAIR (2015 and thereafter). Since this is considerably fewer allowances than there is currently demand for, MassDEP solicits

[16] For more information on the current implementation of this program, please see the March 26, 2003 *Background Document and Technical Support For Public Hearings on Proposed Amendments to 310 CMR 7.00 Et Seq.: 310 CMR 7.28 "NO_x Allowance Trading Program"* (http://www.mass.gov/dep/air/laws/backgrnd.doc) and June 2004 *Summary of Comments and Response to Comments on Proposed Amendments to 310 CMR 7.28 NO_x Allowance Trading Program to establish the Public Benefit Set-Aside Allocation Process and Proposed Revisions to the State Implementation Plan for Ozone* (http://www.mass.gov/dep/air/laws/pbsartc.doc).

comment on whether the PBSA should be larger (e.g., 10% of the state budget). The set-aside could ramp up over time (e.g., 5% from 2009 to 2011, 8% from 2012 to 2014, 10% in 2015 and thereafter), or decrease over time (e.g., 10% from 2009 to 2014, 5% in 2015 and thereafter).

PBSA CAIR NO_x Ozone Season allowance calculation methodologies under Mass CAIR will remain largely consistent with the provisions in the existing NO_x Allowance Trading Program. However, MassDEP proposes the following alteration to the PBSA program at this time. In order to avoid double counting, it is important for MassDEP to be able to determine whether more than one proponent has submitted an application for PBSA CAIR NO_x Ozone Season allowances for the same energy saved or generated. Because it is common for energy efficiency projects to be paid for by a combination of private funds and public funds from the System Benefit Charge (SBC) account, MassDEP is proposing to require PBSA project proponents to indicate the split between private and public funding of their project, by calculating the percent of their project paid for using private funds.[17] To apportion project costs between private and public funds, MassDEP proposes that proponents use the same cost categories used by the Massachusetts Division of Energy Resources (DOER) and the Department of Telecommunications and Energy (DTE) when these agencies assess SBC cost-effectiveness and the extent to which SBC funds support the competitive market for energy efficient products and services.[18] MassDEP seeks comment on the factors relevant to determining the percent of a project paid for by private funds, on whether it is reasonable to use the same cost categories used by DOER/DTE in evaluating the SBC program, and on the proposed calculation of private cost contribution.

New Unit Set-aside

The existing NO_x Allowance Trading Program and the Mass CAIR program allocate allowances to existing units several years before they can be used for compliance in order to allow facilities to plan in advance for compliance. In order to have allowances available for allocation for new units as they come on line, some allowances of each vintage[19] year must be retained in a set-aside. The Model Rule establishes the New Unit Set-aside at 5% of a state's budget for 2009-2014 (Phase I), and then decreases the New Unit Set-aside to 3% of the state budget when the budget decreases in 2015 (Phase II).

MassDEP's current NO_x Allowance Trading Program New Unit Set-aside is 5% of the total budget (643 tons). The New Unit Set-aside was fully subscribed in 2003 and 2005 and was almost fully subscribed in 2004. MassDEP proposes to keep the Set-aside at 5% for both Phase I and II of Mass CAIR (rather than decreasing it to 3% in Phase II) to

[17] SBC monies are collected through consumers' monthly electricity bills.

[18] Most PBSA applicants are energy services companies that implement large energy efficiency projects in Massachusetts using SBC monies and therefore already use the DOER/DTE cost categories. MassDEP proposes that the private (also known as "participant") cost contribution percent be calculated as the participant cost (tracked in DOER/DTE cost category A006) divided by the sum of: participant costs (A006); sales, technical assistance, and training costs (A004); and customer incentives (A003).

[19] The first year in which an allowance can be used for compliance purposes is the "vintage" of that allowance, e.g., a 2009 vintage allowance.

encourage new efficient units. Decreasing the set-aside to 3% when the overall NO_x budget decreases in Phase II would significantly reduce the number of CAIR NO_x Ozone Season allowances available for new units. Therefore, MassDEP proposes to keep the New Unit Set-aside at 5% of its budgets. If the state budget is expanded to include all units in the NO_x Allowance Trading Program as proposed, the New Unit Set-aside would be 396 tons for Phase I of CAIR (2009-2014) and 333 tons for Phase II of CAIR (2015 and thereafter).

Banked Set-Aside Allowances

MassDEP proposes that any unallocated set-aside CAIR NO_x Ozone Season allowances be banked for allocation in future years just as NO_x allowances have been under the NO_x Allowance Trading Program. If requested allocations from a set-aside exceed available CAIR NO_x Ozone Season allowances, up to 2% of the total State budget can be transferred from one set-aside to the other, provided CAIR NO_x Ozone Season allowances are available. Note that the PBSA has been oversubscribed for the last two ozone seasons. Therefore, if MassDEP continues to receive similar requests for allowances from its PBSA, it is unlikely that allowances will be available for transfer from the PBSA to the New Unit Set-aside in the future.

Similar to the existing program, if, after allocation in a given year, banked CAIR NO_x Ozone Season allowances in a set-aside equal 10% of the total State budget or greater, then CAIR NO_x Ozone Season allowances in that set-aside in excess of 5% of the State budget will be allocated to existing units.

D. Allocation Approach

Input vs. Output

For Mass CAIR, MassDEP proposes to adopt an output-based allocation methodology similar to that employed in the existing NO_x Allowance Trading Program. Under this output-based approach, facilities that produce both steam and electricity will receive CAIR NO_x Ozone Season allowances for their steam and electricity output. In contrast, the Model Rule allocates CAIR NO_x Ozone Season allowances based on regulated facilities' heat input data from 2000-2004. For the existing NO_x Allowance Trading Program, MassDEP allocated NO_x allowances on the basis of regulated facilities' electrical and heat output, as opposed to heat input, because output-based allocations reward more efficient generation. MassDEP also implemented multi-pollutant output-based emission standards for six large electric generating facilities through 310 CMR 7.29, *Emissions Standards for Power Plants*.

Updating Allocations

For Mass CAIR, MassDEP proposes to annually update output baselines before calculating allocations. In contrast, the Model Rule allocates CAIR NO_x Ozone Season allowances based on 2000-2004 data for the life of the CAIR program. MassDEP prefers

to base allocations on more current data and therefore proposes to adopt an updating allocation methodology consistent with the existing NO_x Allowance Trading Program. Under this allocation framework, the budget is fixed but the allocations are dynamic. As a result, individual unit allocations will vary from year to year in proportion to the fraction each unit's output is of the output of all units. New units entering the program will receive CAIR NO_x Ozone Season allowances according to the allocation methodology detailed in Section E below. Units currently in the program that retire will eventually stop receiving CAIR NO_x Ozone Season allowances, also according to the allocation methodology detailed in Section E. The addition and subtraction of units in this manner will not affect the total sum of CAIR NO_x Ozone Season allowances available to all units in the program, but may impact individual unit allocations based on their output relative to the output of other units.

Allocation vs. auction

Environmental groups have requested that MassDEP auction all or a fraction of CAIR NO_x Ozone Season allowances. However, Massachusetts' General Laws do not provide MassDEP with the authority to auction allowances. Therefore, MassDEP proposes to allocate CAIR NO_x Ozone Season allowances in the manner described in this document. MassDEP will amend these rules if the Commonwealth decides that MassDEP should auction all or a fraction of allowances and provides MassDEP with legislative authority to conduct auctions.

E. Allocation Formulas

In Mass CAIR, MassDEP proposes to use allocation formulas similar to those employed in the existing NO_x Allowance Trading Program. However, MassDEP is proposing several changes based on the different deadlines in the federal CAIR and to improve program administration.

Existing Units – Allocation Factors

Under the NO_x Allowance Trading program, MassDEP allocates to facilities at the same rate for steam output (0.44 lbs $NO_x/MMBtu_{output}$) as electricity output (1.5 lbs NO_x/MWh).[20] MassDEP proposes to continue to allocate to existing units at this rate in Mass CAIR.

Existing and New Units – Timing Issues

MassDEP proposes to allocate CAIR NO_x Ozone Season allowances four years before they can be used (the minimum allowed by EPA), and to allow new units to begin receiving CAIR NO_x Ozone Season allowances from the existing unit pool more quickly by decreasing the minimum years of operation required to establish a baseline from five ozone seasons to one ozone season. The Model Rule allocates CAIR NO_x Ozone Season

[20] Note that 1 MWh = 3.413 MMBtu; and (1.5 lbs NO_x/MWh) / (3.413 MMBtu/MWh) = 0.44 lbs NO_x/MMBtu. Therefore, 0.44 lbs NO_x/MMBtu = 1.5 lbs NO_x/MWh.

allowances six years ahead of the year when they can be used. In addition, new units must operate and have five complete ozone seasons of data to establish their baseline before they can obtain CAIR NO_x Ozone Season allowances from the existing unit pool (versus from the New Unit Set-aside). The combined effect of these two requirements is that under the Model Rule, new units must wait at least 11 years to become part of the regular allocation process. This can create a disadvantage for new units and overburden the New Unit Set-aside.

Under the existing NO_x Allowance Trading Program, MassDEP makes the first allocation to a new unit from the existing unit pool in the spring following the first ozone season in which the new unit operates, whether or not it had operated for one full ozone season. For Mass CAIR, MassDEP proposes to wait until after a unit has at least one full ozone season of output data before allocating to a unit from the existing unit pool under Mass CAIR.

To reduce the volatility in CAIR NO_x Ozone Season allowance allocations from year to year, MassDEP proposes to allocate to units from the existing unit pool using the most recent three years of full ozone season output data, where available. Consistent with the current NO_x Allowance Trading Program, MassDEP proposes to base the allocation on the average of the two highest ozone seasons out of the three ozone seasons prior to the allocation occurring. According to this proposal, units that have only operated for two full ozone seasons would receive CAIR NO_x Ozone Season allowances from the existing unit pool proportional to the average output from those two seasons. Units that have only operated for one full ozone season would receive CAIR NO_x Ozone Season allowances from the existing unit pool proportional to the output from that ozone season.

New Units – Allocation Factors

To promote equity in allocations to new and existing units, MassDEP proposes to allocate to new units at the same rate as existing units to the extent feasible given the size of the New Unit Set-aside.

The existing NO_x Allowance Trading Program uses a different allocation ratio for steam and electricity for new units versus existing units. New units are allocated at 0.2 lbs NO_x/MWh for electricity generation and 0.44 lbs NO_x/$MMBtu_{output}$ for steam generation. Existing units are allocated at 1.5 lbs NO_x/MWh for electricity generation and 0.44 lbs NO_x/$MMBtu_{output}$ for steam generation.

For Mass CAIR, MassDEP proposes to equalize these ratios and allocate to both new and existing units at 1.5 lbs NO_x/MWh for electricity generation and 0.44 lbs NO_x/$MMBtu_{output}$ for steam generation.

Because allocations to existing units calculated using these formulas will exceed available CAIR NO_x Ozone Season allowances, existing units will not receive allocations at the full 0.44 lbs NO_x/$MMBtu_{output}$ and 1.5 lbs NO_x/MWh. Instead, allocations to existing units will be prorated so that the total allocations do not exceed available CAIR

NO_x Ozone Season allowances. To ensure that new units will not receive allocations at a higher rate for their energy production than existing units, MassDEP proposes to apply the same prorated adjustment factor it uses to calculate existing unit allocations for a vintage year to new unit allocations for the same vintage year. If the prorated new unit allocation exceeds the CAIR NO_x Ozone Season allowances available for new units, then allocations to new units would be further prorated.

New Units – Timing Issues

The Model Rule requires states to submit new unit allocations to EPA by July 31, two months before the end of the ozone season on September 30. This deadline prevents MassDEP from allocating to new units after each ozone season based on their output for that season, as occurs under the existing NO_x Allowance Trading Program. Therefore, MassDEP proposes to submit new unit allocations to EPA by July 31 based on either the unit's permitted emissions or the prior year's ozone season output data (as explained below), until the new unit can use CAIR NO_x Ozone Season allowances allocated from the existing unit pool.

The Model Rule requires new units to purchase CAIR NO_x Ozone Season allowances to cover emissions in their first ozone season of operation. However, MassDEP wants to encourage clean new units as much as possible, and therefore proposes to provide new units with CAIR NO_x Ozone Season allowances in their first ozone season of operation. Because MassDEP must submit new unit allocations to EPA by July 31 without the benefit of complete ozone season data for any new unit that commences operation that same year, MassDEP proposes to allocate to new units in their first ozone season of operation according to their maximum permitted emissions for the entire ozone season. To be eligible for this allocation, the unit must demonstrate to MassDEP by July 17 that it has commenced operation and has submitted an electronic NO_x emissions report to EPA for the second calendar quarter (ending June 30).

The Model Rule allows a new unit to delay the certification of emissions monitors and reporting of NO_x emissions for up to 90 operating days, or 180 calendar days, after first fire, whichever comes first. Also, facilities are not obligated to retire CAIR Ozone Season NO_x allowances for emissions prior to monitor certification, or the certification deadline, whichever comes first. Based on extensive experience with new units coming on line in Massachusetts, MassDEP believes it is highly unlikely that a new unit would come on-line after June 30 and accrue 90 operating days by September 30, such that it would be required to certify emissions monitors, report emissions, and hold CAIR NO_x Ozone Season allowances. Therefore, MassDEP's proposal covers all new units in any given year so that they will not need to purchase CAIR NO_x Ozone Season allowances for the first ozone season in which they operate.

To ensure that there is sufficient time for facility owners/operators to review proposed new unit allocations, MassDEP proposes to send draft new unit allocations to each new unit applicant by July 7 of each year. Applicants will have until July 17 to notify MassDEP of any errors in the output data and the calculation of the allocations. If

MassDEP receives comments and makes revisions to the allocations, it will provide a five-day review period on the revised allocations before sending the final allocation to EPA.

CAIR Sources That Regasify Liquefied Gas

To meet New England's energy needs, there are two Liquefied Natural Gas (LNG) facilities proposed for construction in federal waters off the Massachusetts coast (i.e Northeast Gateway and Neptune) and one proposed within Massachusetts (i.e. Weaver's Cove). These facilities use natural gas-fired boilers and heaters to vaporize LNG prior to sending the natural gas into pipelines. A unit at these facilities would meet the proposed Mass CAIR applicability criteria if it was: a boiler or heater with a capacity of 250 MMBtu/hr or more, or an electric generating unit serving a generator with a nameplate capacity of 15 MW or more.

The two proposed off-shore facilities are deepwater ports located in federal waters. Under the federal Deepwater Port Act, US EPA has jurisdiction for issuing permits and approvals to such facilities, using the regulations of the nearest adjacent coastal state, in this case, Massachusetts.[21]

Currently, the Northeast Gateway and Weaver's Cove LNG facilities would not trigger the proposed Mass CAIR applicability criteria because the proposed units do not have a capacity of 250 MMBtu/hr or 15 MW or more. However, the proposed Neptune LNG facility does include natural gas-fired boilers greater than 250 MMBtu/hr. Neptune plans to begin vaporization operations in October 2009. These units would trigger the proposed Mass CAIR applicability criteria, and therefore would be subject to the requirements of the proposed Mass CAIR under the Deepwater Port Act, including monitoring, recordkeeping, reporting and holding CAIR NO_x Ozone Season allowances equal to the total tons of NO_x reported each ozone season. Based on Neptune's preconstruction air permit application, MassDEP estimates that Neptune would be limited to approximately 8 tons of NO_x emissions per ozone season.

MassDEP requests comment on allocating to regasification units in the same fashion as all other units. If Neptune is allocated CAIR NO_x Ozone Season allowances by MassDEP using the proposed allocation formulas for existing facilities, Neptune would

[21] 33 USC 1518(b) Law of nearest adjacent coastal State as applicable Federal law; Federal administration and enforcement of such law; nearest adjacent coastal State defined
The law of the nearest adjacent coastal State, now in effect or hereafter adopted, amended, or repealed, is declared to be the law of the United States, and shall apply to any deepwater port licensed pursuant to this chapter, to the extent applicable and not inconsistent with any provision or regulation under this chapter or other Federal laws and regulations now in effect or hereafter adopted, amended, or repealed. All such applicable laws shall be administered and enforced by the appropriate officers and courts of the United States. For purposes of this subsection, the nearest adjacent coastal State shall be that State whose seaward boundaries, if extended beyond 3 miles, would encompass the site of the deepwater port.

receive approximately 150 to 220 NO_x allowances per ozone season based on MassDEP-estimated useful thermal output used to vaporize the LNG.[22]

F. Existing Unit Allocations for 2009-2011

The federal CAIR requires states to submit existing unit allocations for 2009, 2010, and 2011 to EPA by April 30, 2007. MassDEP proposes to allocate to existing units for the 2009 through 2011 control periods using the same output baseline. This approach allows MassDEP to base these allocations on the most recent output data available at this time. Therefore, units will receive CAIR NO_x Ozone Season allowances proportional to the average of the two highest control periods from 2004 to 2006. To maximize the amount of time available for public comment, MassDEP has provided preliminary allocations in Table 4, and attached the spreadsheets containing the allocation calculations as Appendices B and C.

[22] Allocation of CAIR NO_x Ozone Season allowances to Neptune in this range would decrease the amount of CAIR NO_x Ozone Season allowances available to Massachusetts' existing units by 3% (ranging from 1 to 43 allowances per facility). Presumably Neptune would sell unneeded NO_x allowances on the NO_x allowance market.

Table 4. Proposed Mass CAIR Allocations for 2009, 2010, and 2011.

ORIS Code	Unit Name	NOx Allowances
55211	ANP Bellingham Energy Company	389
55212	ANP Blackstone Energy Company	421
10307	Bellingham Cogen	216
55041	Berkshire Power	203
1594	Blackstone Street	10
1619	Brayton Point	1,208
1599	Canal Station	648
1682	Cleary Flood	9
52026	Dartmouth Power	34
10823	Deer Island Treatment	3
55026	Dighton	108
1631	Doreen	0
55317	Fore River	585
1586	Framingham Station	0
10029	GE Aircraft Engines Lynn	14
1595	Kendall Square	282
880023	Kneeland Station	98
10802	Lowell Cogeneration	0
54586	Lowell Power	0
10726	Masspower	149
1592	Medway Station	0
54805	Milford Power	62
55079	Millennium Power Partners	310
54907	MIT Central Utility	84
1606	Mount Tom	136
1588	Mystic	1,404
1589	New Boston	80
10522	Pepperell	0
50002	Pittsfield Generating	50
1660	Potter	3
1626	Salem Harbor	391
1613	Somerset	128
10176	South Boston Combustion Turbines	1
6081	Stony Brook	63
1678	Waters River	7
1642	West Springfield	25
1643	Woodland	0
		7,121

G. Timing of Mass CAIR vs. Existing NO_x Allowance Trading Program

The Model Rule establishes a number of deadlines that States may not change. Specifically, States cannot postpone the deadline to report new and existing unit allocations to EPA (July 31 and October 31, respectively). States cannot change the CAIR NO_x Ozone Season allowance transfer deadline (November 30) or the dates EPA records CAIR NO_x Ozone Season allowances for new and existing units (September 1 and December 1, respectively). To accommodate these deviations from the NO_x Allowance Trading Program, MassDEP proposes to change several application and reporting deadlines for which EPA has provided States with flexibility.

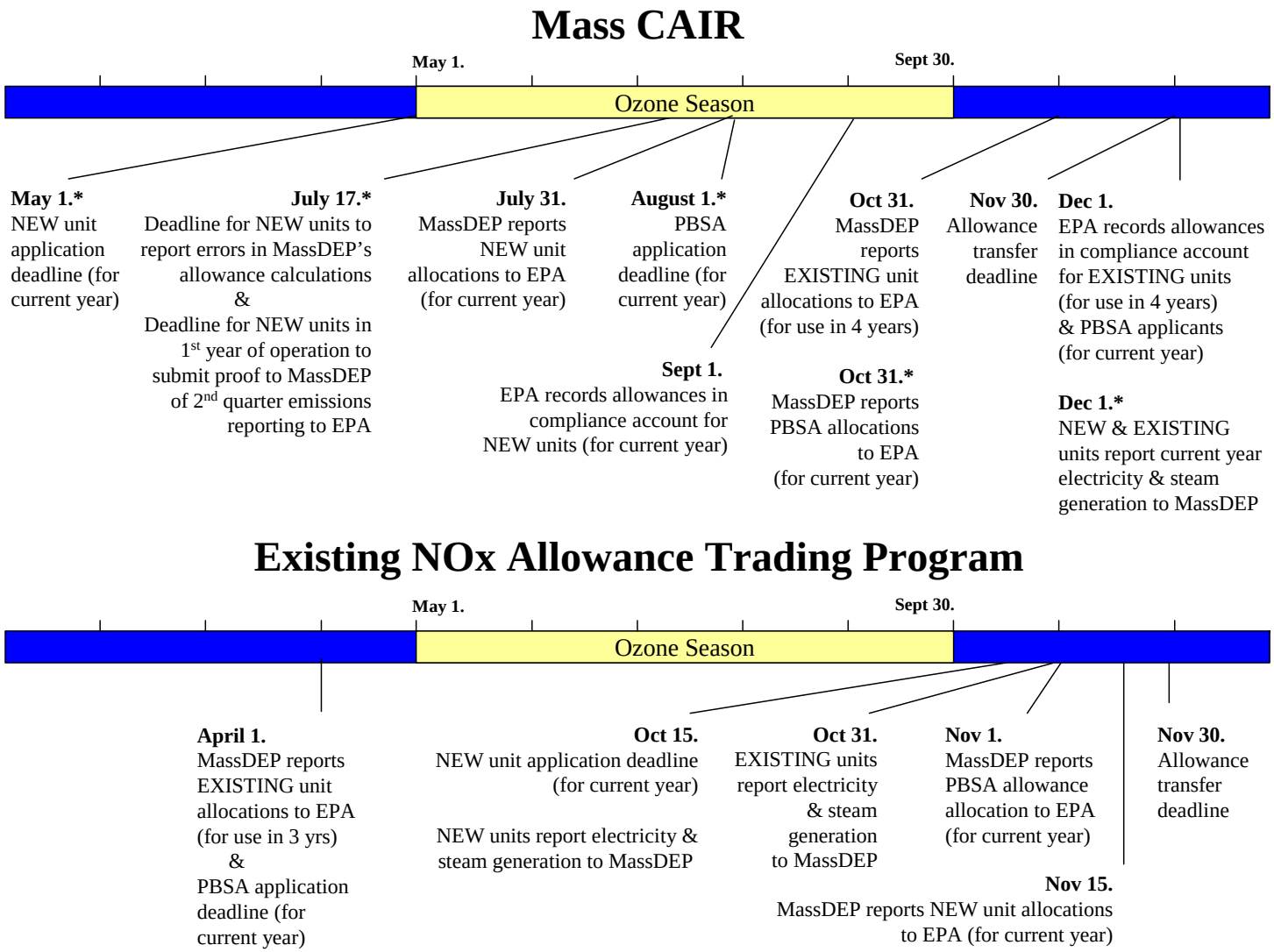
Under the NO_x Allowance Trading Program, MassDEP requires existing units to report output data by October 31, and new units to report output data no later than October 15. Because of EPA's Model Rule deadlines, MassDEP will not need units' output data as soon after the conclusion of the ozone season as MassDEP required for the implementation of the NO_x Allowance Trading Program. Therefore, under Mass CAIR, MassDEP proposes to move the annual deadline for reporting output data for both existing and new units to "on or before December 1." This change in the output reporting deadline will become effective in 2009.

MassDEP proposes an application deadline for PBSA CAIR NO_x Ozone Season allowances of August 1. This deadline should provide applicants with sufficient time to assess energy savings for the previous year's ozone season. MassDEP will report allocations from the PBSA to EPA on or before December 1, paralleling the deadline for reporting allocations for existing units. This change also will become effective in 2009.

MassDEP also proposes new deadlines for activities related to allocation from the New Unit Set-aside that are different than those in the current NO_x Allowance Trading Program. See Section C "New Unit and Public Benefit Set-asides."

See Figure 1 for a more detailed summary of these changes.

Figure 1. Timeline Comparison of Mass CAIR and the existing NO_x Allowance Trading Program. (Asterisks indicate dates States are allowed to alter.)



H. Opt-ins

The federal CAIR allows states to decide whether to include a provision that allows non-CAIR units to "opt-in" to the CAIR program. However, states cannot require units to opt-in. To be eligible, units must vent through a stack and meet federal monitoring, recordkeeping, and reporting requirements (i.e., 40 CFR Part 75). The Model Rule allocates CAIR NO_x Ozone Season allowances to opt-in sources at 70% of their baseline emissions using a heat input-based methodology and increases the state's CAIR budget proportionally. Because MassDEP proposes that Mass CAIR will use output-based allocations, and the federal CAIR provisions appear to preclude this method for opt-in sources, MassDEP is proposing to not include an opt-in provision. Furthermore, because no units opted in to the existing NO_x Allowance Trading Program, MassDEP believes that it is unlikely that there are units with an interest in opting in to the Mass CAIR program. Proposing to exclude the opt-in provision at this time does not restrict MassDEP's ability to adopt an opt-in provision at a later date.

I. Permitting

MassDEP proposes to adopt most of the Model Rule permitting provisions. However, MassDEP has made modifications to the permitting sections relevant to the collection of output data, and also has modified the permitting applicability section so that all Mass CAIR units will be required to have Mass CAIR permits.

J. Reporting

Under the existing NO_x Allowance Trading Program, all units recording NO_x emissions data with Continuous Emission Monitoring Systems (CEMS) are required to submit quarterly data emission reports year-round. The Model Rule only requires the facilities subject to the Acid Rain Program or the CAIR NO_x and SO_2 Annual Trading Programs (Massachusetts is not a part of the CAIR NO_x and SO_2 Annual Trading Programs) to report emissions data year-round. A number of units in Massachusetts are subject only to the ozone season CAIR program, and not the Acid Rain Program or the CAIR NO_x and SO_2 Annual Trading Programs. Therefore these units would not be required to submit emission data outside of the ozone season. MassDEP proposes to require that the units listed in Table 5 continue to report on a year-round basis because of the importance of this data for other air quality planning efforts related to regional haze and $PM_{2.5}$.[23] Since both regional haze and $PM_{2.5}$ are year-round issues, MassDEP believes that it is important to require facilities with CEMS to report data for the entire year.

Similar to the NO_x Allowance Trading Program, MassDEP is proposing to not require units without CEMS to report emissions on a year-round basis. Certain small units are exempt under 40 CFR Part 75 monitoring regulations from installing CEMS, due to consideration of the burden on units that emit a very small portion of total emissions. Instead they are allowed to estimate NO_x emissions using generic defaults contained at 40 CFR 75.19(c) for NO_x emission rate, or a unit-specific value determined from stack testing. Generic default emission rates overestimate

[23] Massachusetts is required to submit a Regional Haze SIP in December 2007 and to update that SIP at regular intervals in future years. With respect to $PM_{2.5}$, while Massachusetts is in attainment of the 1997 $PM_{2.5}$ standards, EPA has issued a new 24-hour $PM_{2.5}$ standard for which areas' attainment status will be decided in 2009.

NO_x emissions; however, units that infrequently operate often find it economically advantageous to overestimate NO_x emissions rather than install CEMS. While overestimation is a conservative method for regulating emissions during the ozone season, MassDEP would not find over-estimated NO_x emissions reported year-round useful for planning purposes. Therefore MassDEP proposes to not require units without CEMS to report emissions outside of the ozone season.

Table 5. Units with CEMS that will be required to submit NO_x emissions data throughout the year, even though they are not required to do so by the federal CAIR Model Rule.

Station	Units	ORIS Code
Blackstone Street	11 & 12	1594
GE Aircraft Engines Lynn	3 & 5	10029
Milford Power	1	54805
MIT	1	54907
MMWEC - Stonybrook	1-3	6081
Pittsfield	1-3	50002
Trigen - Kneeland St.	K1-4	880023

IV. Request for Comments

MassDEP solicits comments on any of the provisions set forth in the proposed 310 CMR 7.32 and on the amendments proposed to 310 CMR 7.28. However, commenters should consider the limited ability of MassDEP to modify those provisions of the Model Rule not identified as one of the three areas allowing flexibility (i.e., including non-Model Rule units, the allocation methodology, and including an opt-in provision).

V. Agricultural Impacts

Pursuant to Massachusetts General Law, Chapter 30A, Section 18, state agencies must evaluate the impact of proposed programs on agriculture within the Commonwealth.

The proposed amendments are not expected to have any negative impacts on agricultural production in Massachusetts. Minor positive benefits to agricultural production may accrue from reduced nitrification of water bodies, reduced acid rain deposition, and reduced ground-level ozone that will result from reductions in NO_x emissions.

VI. Impact on Massachusetts Municipalities

The proposed regulation primarily affects large power generators and industrial units. Only three cities in Massachusetts have municipal power plants that are subject to the proposed Mass CAIR, Braintree, Peabody, and Taunton. These three facilities may need to install additional controls or purchase CAIR NO_x Ozone Season allowances to comply. However, ownership and operation of a power plant, which many municipalities voluntarily undertake, is not a mandated municipal service. Therefore, costs associated with operation of a power plant are not mandated costs

subject to the restrictions of Proposition 2 ½ (Town of Norfolk v. Department of Environmental Quality Engineering, 407 Mass 233 (1990)).

The proposed amendments may have positive impacts on cities and towns that can earn CAIR NO_x Ozone Season allowances by implementing energy efficiency projects in schools or other public buildings. These CAIR NO_x Ozone Season allowances may be sold to help cover the costs incurred from implementing the project or other municipal costs.

VII. Massachusetts Environmental Policy Act

These proposed regulations are "categorically exempt" from the "Regulations Governing the Preparation of Environmental Impact Reports," 301 CMR 11.00, because the proposed regulations will result in reduced levels of emissions. All reasonable measures have been taken to minimize adverse impacts.

VIII. Impacts on Other Programs

Air Toxics

Air toxics are a group of chemical air contaminants that are associated with significant environmental impacts or adverse health effects such as cancer, reproductive effects and birth defects. The federal Clean Air Act requires EPA to promulgate source-specific controls based on Maximum Achievable Control Technologies (MACT) for air toxics. MassDEP implements MACT standards as EPA promulgates them. In addition, MassDEP controls air toxics through reductions of criteria pollutants and through its Toxics Use Reduction Program. Toxics use reduction is a MassDEP priority. Toxics use reduction is defined as in-plant practices that reduce or eliminate the total mass of contaminants discharged to the environment. The proposed regulation will promote toxics use reduction by encouraging energy efficiency and the generation of renewable energy. The lower NO_x emissions cap should result in a reduction of NO_x emissions and other toxic pollutants from existing electric generating units.

IX. Public Participation

As provided by state law, MassDEP gives notice and provides the opportunity to review the proposed Massachusetts Clean Air Interstate Rule and amendments to the NO_x Allowance Trading Program, the background document and any technical information, at least 21 days prior to holding a public hearing. Since the proposed regulation is in response to federal law and will be submitted to EPA, formal notice will be issued 30 days before the public hearings. The hearings will be held in accordance with the procedures of MGL Chapter 30A. A copy of the proposed 310 CMR 7.32 and proposed amendments to 310 CMR 7.28 are available on MassDEP's website at: http://www.mass.gov/dep/. Copies can also be obtained at MassDEP's headquarters at One Winter Street, Boston 02108 as well as each MassDEP regional office.

If there are any questions regarding this document, please contact Nicholas Bianco, 617-292-5705, Nicholas.M.Bianco@state.ma.us, at MassDEP's Boston Office, Bureau of Waste Prevention.

Appendix A. Comparison of Proposed Mass CAIR to Model Rule

Note: Most sections of Mass CAIR include minor differences from the Model Rule due to internal citations (i.e., references to other parts of the rule), even those labeled "Same as CAIR Model Rule."

(1) CAIR NO_x Ozone Season Trading Program General Provisions

- **(a) Purpose.** Modified to reflect purpose of this regulation
- **(b) Definitions.** Federal CAIR Model Rule definitions with additions to support changes made throughout rule.
- **(c) Measurements, abbreviations, and acronyms.** Same as CAIR Model Rule
- **(d) Applicability.** Modified to incorporate all NO_x Allowance Trading Program units, including those not meeting the federal CAIR applicability criteria
- **(e) Retired unit exemption.** Language has been added for clarification purposes only. This is necessary because MassDEP proposes an updating allocation scheme as opposed to CAIR Model Rule permanent allocation scheme
- **(f) Standard requirements.** Modifications to account for Mass CAIR's use of energy output for allocation. Eliminated the following EPA penalty provision since MassDEP does not have statutory authority to carry it out. "Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law."
- **(g) Computation of time.** Same as CAIR Model Rule
- **(h) Appeal procedures.** Same as CAIR Model Rule

(2) CAIR Designated Representative for CAIR NO_x Ozone Season Sources Same as CAIR Model Rule

- **(a) Authorization and responsibilities of CAIR designated representative.**
- **(b) Alternate CAIR designated representative.**
- **(c) Changing CAIR designated representative and alternate CAIR designated representative; changes in owners and operators.**
- **(d) Certificate of representation.**
- **(e) Objections concerning CAIR designated representative.**
- **(f) Delegation by CAIR designated representative and alternate CAIR designated representative.**

(3) Permits

- **(a) General CAIR NO_x Ozone Season Trading Program permit requirements.** Modifications requiring all CAIR units to have a CAIR permit, and not just those units with an Acid Rain permit. Links CAIR permit to Operating Permit issued under 310 CMR 7.00: Appendix C.
- **(b) Submission of CAIR permit applications.** Same as CAIR Model Rule
- **(c) Information requirements for CAIR permit applications.** Modifications to accommodate Mass CAIR's use of energy output for allocation
- **(d) CAIR permit contents and term.** Added provisions specifying methodology and reporting of energy output as basis of CAIR NO_x Ozone Season allowance allocation
- **(e) CAIR permit revisions.** Clarifies provisions relating to Operating Permits

(4) [Reserved] Same as CAIR Model Rule

(5) CAIR NO_x Ozone Season Allowance Allocations Significant changes to entire subsection
- **(a) State trading budgets.**
- **(b) Timing requirements for CAIR NO_x Ozone Season allowance allocations.**
- **(c) CAIR NO_x Ozone Season allowance allocations.**

(6) CAIR NO_x Ozone Season Allowance Tracking System
- **(a) [Reserved]** Same as CAIR Model Rule
- **(b) Establishment of accounts.** Same as CAIR Model Rule
- **(c) Responsibilities of CAIR authorized account representative.** Same as CAIR Model Rule
- **(d) Recordation of CAIR NO_x Ozone Season allowance allocations.** Language added to clarify what applies to new versus existing units. Subdivision added to establish timing of PBSA CAIR NO_x Ozone Season allowance recordation by EPA
- **(e) Compliance with CAIR NO_x emissions limitation.** Same as CAIR Model Rule
- **(f) Banking.** Same as CAIR Model Rule
- **(g) Account error.** Same as CAIR Model Rule
- **(h) Closing of general accounts.** Same as CAIR Model Rule

(7) CAIR NO_x Ozone Season Allowance Transfers Same as CAIR Model Rule
- **(a) Submission of CAIR NO_x Ozone Season allowance transfers.**
- **(b) EPA recordation.**
- **(c) Notification.**

(8) Monitoring and Reporting
- **(a) General requirements.** Same as CAIR Model Rule
- **(b) Initial certification and recertification procedures.** Minor changes since Mass CAIR does not have an Opt-in provision
- **(c) Out of control periods.** Minor changes since Mass CAIR does not have an Opt-in provision
- **(d) Notifications.** Same as CAIR Model Rule
- **(e) Recordkeeping and reporting.** Modifications requiring all sources that monitor NO_x emissions with CEMS to report emissions year round
- **(f) Petitions.** Same as CAIR Model Rule

(9) Monitoring and Recordkeeping for Energy Output This subsection is new
- **(a) Initial certification.**
- **(b) Ongoing QA/QC.**
- **(c) Recordkeeping and Reporting.**

Appendix B. Unit-level Calculations for CAIR NO_x Ozone Season Allowance Allocations Under Mass CAIR

							Submitted Net Output Data for 2006, 2005, 2004:					
ORIS	CAIR Units	Unit Adjusted Allocation (UAA)	Unit Unadjusted Allocation (UUA)	Average Electric Output (AEO)	Average Steam Output (ASO)	New Units: first fire date, nameplate capacity and hours of operation during ozone season	YEAR 2006 THERMAL (MMBtu)	YEAR 2006 ELECTRICAL (MWh)	YEAR 2005 THERMAL (MMBtu)	YEAR 2005 ELECTRICAL (MWh)	YEAR 2004 THERMAL (MMBtu)	YEAR 2004 ELECTRICAL (MWh)
55211	ANP Bellingham 1	186.96	388.84	518,457.02	0.00			534,134.54		430,910.52		502,779.50
55211	ANP Bellingham 2	202.38	420.91	561,209.02	0.00			553,181.80		569,236.23		495,224.94
55212	ANP Blackstone 1	212.74	442.46	589,946.09	0.00			660,796.65		519,095.54		405,017.49
55212	ANP Blackstone 2	208.62	433.88	578,513.21	0.00			717,260.99		439,765.42		324,161.79
10307	Bellingham Cogen - Total	216.29	449.84	566,123.00	114,760.23		0.00	214,602.00	0.00	139,803.00	229,520.45	917,644.00
55041	Berkshire Power	203.07	422.35	563,130.00	0.00			446,930.00		619,985.00		506,275.00
1594	Blackstone St.B11	3.99	8.29	0.00	37,697.00		13,103.00		5,572.00		62,291.00	
1594	Blackstone St.B12	6.34	13.19	0.00	59,938.00		56,605.00		63,271.00		12,182.00	
1619	Brayton Point 1	288.14	599.27	799,029.16	0.00			624,945.00		820,835.00		777,223.32
1619	Brayton Point 2	299.48	622.84	830,453.00	0.00			811,370.00		849,536.00		699,616.40
1619	Brayton Point 3	594.16	1,235.73	1,647,633.50	0.00			1,723,684.00		1,571,583.00		1,271,073.72
1619	Brayton Point 4	25.96	53.99	71,986.43	0.00			21,146.00		121,693.00		22,279.86
1599	Canal 1	461.98	960.82	1,281,089.50	0.00			244,303.00		1,138,191.00		1,423,988.00
1599	Canal 2	186.16	387.17	516,223.50	0.00			441,871.00		546,291.00		486,156.00
1682	Cleary Flood Unit 8	0.54	1.13	1,506.00	0.00			951.00		2,061.00		251.00
1682	Cleary Flood Unit 9	8.41	17.48	23,311.50	0.00			11,650.00		34,973.00		7,819.00
52026	Dartmouth Power	34.19	71.10	94,796.00	0.00			41,282.00		99,141.00		90,451.00
10823	Deer Island-S42	1.63	3.38	4,509.00	0.00			3,125.00		5,893.00		5.00
10823	Deer Island-S43	1.05	2.19	2,915.50	0.00			4,597.00		1,234.00		83.00
55026	Dighton Power	108.08	224.78	299,700.89	0.00			153,843.37		259,814.98		339,586.81
1631	Doreen	0.04	0.09	122.50	0.00			77.00		131.00		114.00
55317	Fore River	584.45	1,215.52	1,620,697.00	0.00			1,650,995.00		1,590,399.00		764,681.00
1586	Framingham	0.28	0.58	773.65	0.00			548.00		713.00		834.30
10029	General Electric, Lynn B#3	12.60	26.20	22,527.00	42,316.50		36,114.00	22,300.00	48,519.00	22,754.00	25,181.04	17,772.85
10029	General Electric, Lynn Tur8	0.80	1.66	2,064.50	487.50		580.00	2,399.00	395.00	1,730.00	205.90	1,019.86
1595	Kendall - Units 1, 2, 3 and Jet	39.41	81.96	56,883.54	178,622.37		54,974.44	37,980.88	32,038.11	16,845.69	302,270.31	75,786.21
1595	Kendall New Unit 4	242.65	504.65	577,197.55	326,137.29		276,067.13	494,064.50	376,207.45	660,330.60	75,056.98	107,780.68
880023	Kneeland Station	97.61	203.00	0.00	922,733.00		932,617.00		912,849.00		695,271.00	
10802	Lowell Cogeneration	0.39	0.80	1,071.55	0.00			444.20		1,698.90		391.00
54586	Lowell Power	0.00	0.00	0.00	0.00			0.00		0.00		0.00
10726	Masspower	148.66	309.18	386,219.00	88,722.00		62,067.00	231,414.00	57,601.00	375,744.00	115,377.00	396,694.00
1592	Medway-Total	0.39	0.81	1,086.50	0.00			950.00		1,223.00		855.00
54805	Milford Power	62.11	129.18	172,236.40	0.00			178,628.92		165,843.87		64,309.20
55079	Millenium Power	310.02	644.76	859,881.50	0.00			925,275.00		794,088.00		485,563.00
54907	MIT Central Utility	83.60	173.87	69,490.50	553,440.00		536,234.00	69,284.00	570,646.00	67,472.00	537,902.48	69,697.00
1606	Mt. Tom	136.39	283.67	378,221.86	0.00			351,524.00		404,919.73		324,966.00
1588	Mystic 4	0.00	0.00	0.00	0.00			0.00		0.00		0.00
1588	Mystic 5	0.00	0.00	0.00	0.00			0.00		0.00		0.00
1588	Mystic 6	0.00	0.00	0.00	0.00			0.00		0.00		0.00
1588	Mystic 7	100.58	209.18	278,905.00	0.00			230,198.00		327,612.00		181,765.00
1588	Mystic CC 8	688.84	1,432.62	1,910,159.50	0.00			2,037,929.00		1,411,876.00		1,782,390.00
1588	Mystic CC 9	614.82	1,278.68	1,704,904.00	0.00			1,797,992.00		1,369,970.00		1,611,816.00
1588	Mystic Jet	0.05	0.11	148.00	0.00			199.00		97.00		67.00
1589	New Boston 1	79.62	165.60	220,796.15	0.00			194,732.00		246,860.30		59,393.00
1589	New Boston 2	0.00	0.00	0.00	0.00			0.00		0.00		0.00
1589	New Boston Jet	0.08	0.16	218.55	0.00			182.00		255.10		124.30
10522	Pepperell	0.00	0.00	0.00	0.00			0.00		0.00		0.00
50002	Pittsfield Generating	49.93	103.84	120,954.00	59,650.00		0.00	63,170.00	0.00	86,785.00	119,300.00	155,123.00
1660	Potter	3.24	6.74	8,983.00	0.00			8,487.91		9,478.09		2,077.49
1626	Salem Harbor 1	94.57	196.68	262,246.50	0.00			257,282.00		267,211.00		227,522.39
1626	Salem Harbor 2	87.70	182.39	243,185.00	0.00			250,467.00		235,903.00		195,978.03
1626	Salem Harbor 3	134.66	280.07	373,421.00	0.00			350,430.00		396,412.00		333,297.94
1626	Salem Harbor 4	74.40	154.73	206,304.50	0.00			183,562.00		229,047.00		52,747.95
1613	Somerset 6	127.73	265.65	354,195.50	0.00			305,422.00		340,855.00		367,536.00
1613	Somerset Jet	0.05	0.10	138.11	0.00			169.21		107.00		53.00
10176	South Boston Combustion Turbines	0.42	0.88	1,176.00	0.00			1,596.00		756.00		533.00
6081	Stony Brook1A	17.81	37.03	49,375.80	0.00			75,448.70		16,184.90		23,302.90
6081	Stony Brook1B	22.90	47.63	63,513.25	0.00			98,885.90		28,140.60		13,083.90
6081	Stony Brook1C	19.74	41.05	54,733.90	0.00			88,134.60		17,218.90		21,333.20
6081	Stony Brook2A	1.40	2.91	3,879.15	0.00			1,347.90		6,410.40		812.90
6081	Stony Brook2B	1.00	2.07	2,761.95	0.00			1,278.90		4,245.00		1,026.10
1678	Waters River 1	1.87	3.89	5,182.50	0.00			2,035.00		8,330.00		1,067.90
1678	Waters River 2	4.72	9.81	13,080.50	0.00			9,749.00		16,412.00		3,010.50
1642	West Springfield 10	0.17	0.34	458.00	0.00			156.00		555.00		361.00
1642	West Springfield 3	9.60	19.97	26,630.50	0.00			14,085.00		39,176.00		8,458.00
1642	West Springfield CTG1	8.04	16.73	22,304.50	0.00			33,326.00		11,283.00		5,912.00
1642	West Springfield CTG2	7.25	15.08	20,108.50	0.00			24,910.00		15,307.00		3,402.00
1643	Woodland	0.25	0.52	696.50	0.00			61.00		1,299.00		94.00
	ADJUSTED TOTAL:	7,121.00	14,810.04									
	Adjusted Total Should Equal:	7,121.00										

Appendix C. Facility-level Calculations for CAIR NO_x Ozone Season Allowance Allocations Under Mass CAIR

ORIS	Unit Name	Unrounded Facility Allocation	Rounded Facility Allocation	truncated	decimal	decimal correction	max/min	2009, 2010, 2011 FACILITY ALLOCATION
55211	ANP Bellingham Energy Company	389.35	389	389.346	346	346	0	**389**
55212	ANP Blackstone Energy Company	421.37	421	421.366	366	366	0	**421**
10307	Bellingham Cogen	216.29	216	216.293	293	293	0	**216**
55041	Berkshire Power	203.07	203	203.074	74	74	0	**203**
1594	Blackstone Street	10.33	10	10.328	328	328	0	**10**
1619	Brayton Point	1,207.74	1208	1207.743	743	743	0	**1208**
1599	Canal Station	648.14	648	648.141	141	141	0	**648**
1682	Cleary Flood	8.95	9	8.95	0.95	950	0	**9**
52026	Dartmouth Power	34.19	34	34.185	185	185	0	**34**
10823	Deer Island Treatment	2.68	3	2.677	677	677	0	**3**
55026	Dighton	108.08	108	108.077	77	77	0	**108**
1631	Doreen	0.04	0	0.044	44	44	0	**0**
55317	Fore River	584.45	584	584.451	451	451	451	**585**
1586	Framingham Station	0	0	0	0	0	0	**0**
10029	GE Aircraft Engines Lynn	13.40	13	13.396	396	396	0	**14**
1595	Kendall Square	282.05	282	282.054	54	54	0	**282**
880023	Kneeland Station	97.61	98	97.608	608	608	0	**98**
10802	Lowell Cogeneration	0.39	0	0.386	386	386	0	**0**
54586	Lowell Power	0.00	0	0	0	0	0	**0**
10726	Masspower	148.66	149	148.662	662	662	0	**149**
1592	Medway Station	0.39	0	0.392	392	392	0	**0**
54805	Milford Power	62.11	62	62.111	111	111	0	**62**
55079	Millennium Power Partners	310.02	310	310.016	16	16	0	**310**
54907	MIT Central Utility	83.60	84	83.603	603	603	0	**84**
1606	Mount Tom	136.39	136	136.393	393	393	0	**136**
1588	Mystic	1,404.28	1404	1404.284	284	284	0	**1404**
1589	New Boston	79.70	80	79.702	702	702	0	**80**
10522	Pepperell	0.00	0	0	0	0	0	**0**
50002	Pittsfield Generating	49.93	50	49.928	928	928	0	**50**
1660	Potter	3.24	3	3.239	239	239	0	**3**
1626	Salem Harbor	391.33	391	391.326	326	326	0	**391**
1613	Somerset	127.78	128	127.779	779	779	0	**128**
10176	South Boston Combustion Turbines	0.42	0	0.424	424	424	424	**1**
6081	Stony Brook	62.84	63	62.843	843	843	0	**63**
1678	Waters River	6.59	7	6.586	586	586	0	**7**
1642	West Springfield	25.06	25	25.063	63	63	0	**25**
1643	Woodland	0.25	0	0.251	251	251	0	**0**
	TOTALS:	**7120.72**	**7118**				**451**	**7121**
	manually adjusted	7121						

Appendix D. Proposed regulatory revisions to 310 CMR 7.28

Modify 310 CMR 7.28 by adding text in italics and deleting text in strikethroughs below:

(1) Purpose and Scope.

(a) The purpose of 310 CMR 7.28 is to control emissions of nitrogen oxides (NO_x) during the summertime control period (May 1 through September 30 of each year). 310 CMR 7.28 accomplishes this by establishing a state trading program budget for NO_x during each control period *from 2003 to 2008,* implemented through a NO_x allowance trading program beginning May 1, 2003. *The Massachusetts Clean Air Interstate Rule (310 CMR 7.32) will supercede this program beginning with the control period in 2009.*

(3) The Massachusetts NO_x State Trading Program Budget.

(a) For each year from 2003 ~~onward~~ *to 2008* the Massachusetts NO_x state trading program budget is 12,861 tons of NO_x for each control period.

(5) General Provisions.

(a) ~~Beginning May 1, 2003~~*For each control period from 2003 to 2008,* any person who owns, leases, operates or controls a budget unit must, by November 30 of each calendar year, possess a number of current year or banked NO_x allowances in the budget unit's compliance or overdraft accounts that are available for compliance under 40 CFR 96.54, equal to or greater than the total tons of NO_x emitted by that budget unit from May 1 through September 30 of that year. Allowances for which transfer requests have been submitted in accordance with 310 CMR 7.28(10) by November 30 are considered to be in the compliance or overdraft account.

(6) Allowance Allocation.

(a) New Unit Set-aside.

1. *For e*~~E~~ach ~~calendar~~ year from 2003 *to 2008*~~onward~~, the Department will allocate 5% of the Massachusetts NO_x state trading program budget to a new unit set-aside account. New budget units may request allowances from this new unit set-aside account according to the procedures in 310 CMR 7.28(6)(c), and the Department will allocate allowances from the new unit set-aside account to the new budget unit. If, in total, new budget units request more allowances than are available in the new unit set-aside account that calendar year, including those available under 310 CMR 7.28(6)(a)2., then allowances will be allocated to the new budget units by the Department pro rata based on net control period electrical and useful steam output.

(b) Public Benefit Set-aside.

1. *For each year from* ~~Beginning in~~ 2003 *to 2008,* the Department will annually allocate 5% of the Massachusetts NO_x state trading program budget to a public benefit set-aside (PBSA) account to provide for allocation of

allowances for Energy Efficiency Projects (EEPs) and Renewable Energy Projects (REPs).

(d) Allocation Process for Existing Budget Units.

1. Except as stated in 310 CMR 7.28(6)(d)3., for each control period from 2003 *to 2008*~~onward~~, the Department will allocate allowances to existing budget units using the formulae in 310 CMR 7.28(6)(d)1. Allocations will be made by April 1 of each year, three years before the control period the allowances are first usable. Allowances will be allocated to the overdraft account for each facility, or for facilities with only one budget unit, to the unit's compliance account. If a name or Office of Regulatory Information Systems (ORIS) code change occurs for a facility after 310 CMR 7.28 is promulgated, the Department will incorporate that change in its allocation process.

4. ~~Beginning with~~ *For* the allocation for the 2008 control period, which occurs in the Spring of 2005, ~~and for each control period thereafter,~~ the Department will forward a template to be used by the budget units for submitting control period output data. After receiving output data from the budget units, the Department will calculate the allocation for the particular control period and forward a draft spreadsheet containing all of the budget units' allocations, including output data and calculations, to the budget units. There will be a 30-day comment period during which budget units may notify the Department of any errors in the output data and the calculation of the allocations contained in the spreadsheet. If the Department receives any comments and makes revisions to the spreadsheet, then it will provide a ten-day comment period on the revised spreadsheet. The Department will post the final allocation on the Department website and send it to EPA and budget units by April 1st ~~of each year~~, three years before the control period for which the allowances are first useable.

Appendix E. Proposed regulations 310 CMR 7.32

Add 310 CMR 7.32 as follows:

7.32: Massachusetts' Clean Air Interstate Rule (Mass CAIR)

(1) CAIR NO_x Ozone Season Trading Program General Provisions.

(a) Purpose and Scope.

1. The purpose of 310 CMR 7.32 is to control emissions of nitrogen oxides (NO_x) during the summertime control period (May 1 through September 30 of each year) by implementing the CAIR NO_x Ozone Season Trading Program beginning May 1, 2009.
2. The Department will allocate NO_x Ozone Season allowances to each CAIR NO_x Ozone Season source with a CAIR permit issued in accordance with 310 CMR 7.32(3) for each control period as described in 310 CMR 7.32(5) equal to the total Massachusetts NO_x Ozone Season Trading Program budget in tons.
3. CAIR NO_x Ozone Season allowances from other states may be used by CAIR NO_x Ozone Season sources to comply with 310 CMR 7.32.
4. CAIR NO_x Ozone Season allowances allocated by the Department may be used by CAIR NO_x Ozone Season sources to comply with CAIR NO_x Ozone Season Trading Programs of other states, provided the other state has a CAIR NO_x Ozone Season Trading Program approved by EPA.
5. The Department authorizes the Administrator to assist the Department in implementing the CAIR NO_x Ozone Season Trading Program by carrying out the functions set forth for the Administrator in 310 CMR 7.32.

(b) Definitions. The definitions in 310 CMR 7.00 apply to 310 CMR 7.32. However, the following terms have the following meanings when they appear in 310 CMR 7.32. If a term is defined both in 310 CMR 7.00 and in 310 CMR 7.32(1)(b), the definition in 310 CMR 7.32(1)(b) applies for purposes of 310 CMR 7.32.

Account number means the identification number given by the Administrator to each CAIR NO_x Ozone Season Allowance Tracking System account.

Acid Rain emissions limitation means a limitation on emissions of sulfur dioxide or nitrogen oxides under the Acid Rain Program.

Acid Rain Program means a multi-state sulfur dioxide and nitrogen oxides air pollution control and emission reduction program established by the Administrator under title IV of the CAA and 40 CFR Parts 72 through 78.

Actual energy efficiency means the percentage of gross energy input that is recovered as useful net energy output in the form of electrical or thermal energy and that is used for heating, cooling, industrial processes, or other beneficial uses.

Addition means an increase in the area, aggregate floor area, height or number of stories of a building.

Administrator means the Administrator of the United States Environmental Protection Agency or the Administrator's duly authorized representative.

Allocate or allocation means, with regard to CAIR NO_x Ozone Season allowances, the determination by a permitting authority or the Administrator of the amount of such CAIR NO_x Ozone Season allowances to be initially credited to a CAIR NO_x Ozone Season unit, a New Unit Set-aside, or other entity.

Allowance transfer deadline means, for a control period, midnight of November 30 (if it is a business day), or midnight of the first business day thereafter (if November 30 is not a business day), immediately following the control period and is the deadline by which a CAIR NO_x Ozone Season allowance transfer must be submitted for recordation in a CAIR NO_x Ozone Season source's compliance account in order to be used to meet the source's CAIR NO_x Ozone Season emissions limitation for such control period in accordance with 310 CMR 7.32(6)(e).

Alternate CAIR designated representative means, for a CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with 310 CMR 7.32(2), to act on behalf of the CAIR designated representative in matters pertaining to the CAIR NO_x Ozone Season Trading Program. If the CAIR NO_x Ozone Season source is also a CAIR NO_x source, then this natural person shall be the same person as the alternate CAIR designated representative under the CAIR NO_x Annual Trading Program. If the CAIR NO_x Ozone Season source is also a CAIR SO_2 source, then this natural person shall be the same person as the alternate CAIR designated representative under the CAIR SO_2 Trading Program. If the CAIR NO_x Ozone Season source is also subject to the Acid Rain Program, then this natural person shall be the same person as the alternate designated representative under the Acid Rain Program. If the CAIR NO_x Ozone Season source is also subject to the Hg Budget Trading Program, then this natural person shall be the same person as the alternate Hg designated representative under the Hg Budget Trading Program.

Automated data acquisition and handling system or DAHS means that component of the continuous emission monitoring system, or other emissions monitoring system approved for use under 310 CMR 7.32(8), designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by 310 CMR 7.32(8).

Bank means to retain CAIR NO_x Ozone Season allowances from one control period pursuant to 310 CMR 7.32(6)(f) for use in a future control period.

Boiler means an enclosed fossil- or other-fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

Bottoming-cycle cogeneration unit means a cogeneration unit in which the energy input to the unit is first used to produce useful thermal energy and at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.

Building means a structure enclosed within exterior walls or firewalls, built, erected and framed of a combination of any materials, whether portable or fixed having a roof, to form a structure for the shelter of person, animal or property, and that is subject to the provisions of 780 CMR 1301.0 *et seq.* For the purpose of this definition, "roof" shall include an awning or similar covering, whether or not permanent in nature. Each portion of a building that is completely separated from other portions by firewalls shall be considered as a separate building.

CAIR authorized account representative means, with regard to a general account, a responsible natural person who is authorized, in accordance with 310 CMR 7.32(2), and (6), to transfer and otherwise dispose of CAIR NO_x Ozone Season allowances held in the general account and, with regard to a compliance account, the CAIR designated representative of the source.

CAIR designated representative means, for a CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with 310 CMR 7.32(2) to represent and legally bind each owner and operator in matters pertaining to the CAIR NO_x Ozone Season Trading Program. If the CAIR NO_x Ozone Season source is also a CAIR NO_x source, then this natural person shall be the same person as the CAIR designated representative under the CAIR NO_x Annual Trading Program. If the CAIR NO_x Ozone Season source is also a CAIR SO_2 source, then this natural person shall be the same person as the CAIR designated representative under the CAIR SO_2 Trading Program. If the CAIR NO_x Ozone Season source is also subject to the Acid Rain Program, then this natural person shall be the same person as the designated representative under the Acid Rain Program. If the CAIR NO_x Ozone Season source is also subject to the Hg Budget Trading Program, then this natural person shall be the same person as the Hg designated representative under the Hg Budget Trading Program.

CAIR NOx Annual Trading Program means a multi-state nitrogen oxides air pollution control and emission reduction program approved and administered by the Administrator in accordance with 40 CFR Part 96 subparts AA through II and 40 CFR 51.123(o)(1) or (2) or established by the Administrator in accordance with subparts AA through II of 40 CFR Part 97 and 40 CFR 51.123(p) and 52.35, as a means of mitigating interstate transport of fine particulates and nitrogen oxides.

CAIR NOx Ozone Season allowance means a limited authorization issued by a permitting authority or the Administrator under provisions of a State implementation plan that are approved under 40 CFR 51.123(aa)(1) or (2) (and (bb)(1)), (bb)(2), (dd), or (ee), or under subpart EEEE of 40 CFR Part 97 or 97.388, to emit one ton of nitrogen oxides during a control period of the specified calendar year for which the authorization is allocated or of any calendar year thereafter under the CAIR NO_x Ozone Season Trading Program or a limited authorization issued by a permitting authority for a control period during 2003 through 2008 under the NO_x Budget Trading Program in accordance with 40 CFR 51.121(p) to emit one ton of nitrogen oxides during a control period, provided that the provision in 40 CFR 51.121(b)(2)(ii)(E) shall not be used in applying this definition and the limited authorization shall not have been used to meet the allowance-holding requirement under the NO_x Budget Trading Program. An authorization to emit nitrogen oxides that is not issued under provisions of a State implementation plan approved under 40 CFR 51.123(aa)(1) or (2) (and (bb)(1)), (bb)(2), (dd), or (ee) or subpart EEEE of 40 CFR Part 97 or 97.388 or under the NO_x Budget Trading Program as described in the prior sentence shall not be a CAIR NO_x Ozone Season allowance.

CAIR NOx Ozone Season allowance deduction or deduct CAIR NOx Ozone Season allowances means the permanent withdrawal of CAIR NO_x Ozone Season allowances by the Administrator from a compliance account, e.g., in order to account for a specified number of tons of total nitrogen oxides emissions from all CAIR NO_x Ozone Season units at a CAIR NO_x Ozone Season source for a control period, determined in accordance with 310 CMR 7.32(8), or to account for excess emissions.

CAIR NOx Ozone Season Allowance Tracking System means the system by which the Administrator records allocations, deductions, and transfers of CAIR NO_x Ozone Season allowances under the CAIR NO_x Ozone Season Trading Program. Such allowances will be allocated, held, deducted, or transferred only as whole allowances.

CAIR NOx Ozone Season Allowance Tracking System account means an account in the CAIR NO_x Ozone Season Allowance Tracking System established by the Administrator for purposes of recording the allocation, holding, transferring, or deducting of CAIR NO_x Ozone Season allowances.

CAIR NOx Ozone Season allowances held or hold CAIR NOx Ozone Season allowances means the CAIR NO_x Ozone Season allowances recorded by the Administrator, or submitted to the Administrator for recordation, in accordance with 310 CMR 7.32(6) and (7), in a CAIR NO_x Ozone Season Allowance Tracking System account.

CAIR NOx Ozone Season emissions limitation means, for a CAIR NO_x Ozone Season source, the tonnage equivalent, in NO_x emissions in a control period, of

the CAIR NO_x Ozone Season allowances available for deduction for the source under 310 CMR 7.32(6)(e)1. and 2. for the control period.

CAIR NOx Ozone Season Trading Program means a multi-state nitrogen oxides air pollution control and emission reduction program approved and administered by the Administrator in accordance with subparts AAAA through IIII of 40 CFR Part 96 and 40 CFR 51.123(aa)(1) or (2) (and (bb)(1)), (bb)(2), or (dd) or established by the Administrator in accordance with subparts AAAA through IIII of 40 CFR Part 97 and 40 CFR 51.123(ee) and 52.35, as a means of mitigating interstate transport of ozone and nitrogen oxides.

CAIR NOx Ozone Season source means a source that includes one or more CAIR NO_x Ozone Season units.

CAIR NOx Ozone Season unit means a unit that is subject to the CAIR NO_x Ozone Season Trading Program under 310 CMR 7.32(1)(d).

CAIR NOx source means a source that is subject to the CAIR NO_x Annual Trading Program.

CAIR permit means the legally binding and federally enforceable written document, or portion of such document, issued by the Department under 310 CMR 7.32(3) of this section, including any permit revisions, specifying the CAIR NO_x Ozone Season Trading Program requirements applicable to a CAIR NO_x Ozone Season source, to each CAIR NO_x Ozone Season unit at the source, and to the owners and operators and the CAIR designated representative of the source and each such unit.

CAIR SO2 source means a source that is subject to the CAIR SO2 Trading Program.

CAIR SO_2 Trading Program means a multi-state sulfur dioxide air pollution control and emission reduction program approved and administered by the Administrator in accordance with subparts AAA through III of 40 CFR Part 96 and 40 CFR 51.124(o)(1) or (2) or established by the Administrator in accordance with subparts AAA through III of 40 CFR Part 97 and 40 CFR 51.124(r) and 52.36, as a means of mitigating interstate transport of fine particulates and sulfur dioxide.

Coal means any solid fuel classified as anthracite, bituminous, subbituminous, or lignite.

Coal-derived fuel means any fuel (whether in a solid, liquid, or gaseous state) produced by the mechanical, thermal, or chemical processing of coal.

Coal-fired means:

1. Except for purposes of 310 CMR 7.32(5), combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during any year; or
2. For purposes of 310 CMR 7.32(5), combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during a specified year.

Cogeneration unit means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine:

1. Having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy; and
2. Producing during the 12-month period starting on the date the unit first produces electricity and during any calendar year after the calendar year in which the unit first produces electricity—
   a. For a topping-cycle cogeneration unit,
      i. Useful thermal energy not less than 5 percent of total energy output; and
      ii. Useful power that, when added to one-half of useful thermal energy produced, is not less then 42.5 percent of total energy input, if useful thermal energy produced is 15 percent or more of total energy output, or not less than 45 percent of total energy input, if useful thermal energy produced is less than 15 percent of total energy output.
   b. For a bottoming-cycle cogeneration unit, useful power not less than 45 percent of total energy input.

Combustion turbine means:

1. An enclosed device comprising a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine; and
2. If the enclosed device under subdivision 1. of this definition is combined cycle, any associated duct burner, heat recovery steam generator, and steam turbine.

Commence commercial operation means, with regard to a unit

1. To have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation, except as provided in 310 CMR 7.32(1)(e).
   a. For a unit that is a CAIR NO_x Ozone Season unit under 310 CMR 7.32(1)(d) on the later of November 15, 1990 or the date the unit commences commercial operation as defined in subdivision 1. of this definition and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

b. For a unit that is a CAIR NO_x Ozone Season unit under 310 CMR 7.32(1)(d) on the later of November 15, 1990 or the date the unit commences commercial operation as defined in subdivision 1. of this definition and that is subsequently replaced by a unit at the same source (e.g., repowered), such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in subdivision 1. or 2. of this definition as appropriate.

2. Notwithstanding subdivision 1. of this definition and except as provided in 310 CMR 7.32(1)(e), for a unit that is not a CAIR NO_x Ozone Season unit under 310 CMR 7.32(1)(d) on the later of November 15, 1990 or the date the unit commences commercial operation as defined in subdivision 1. of this definition, the unit's date for commencement of commercial operation shall be the date on which the unit becomes a CAIR NO_x Ozone Season unit under 310 CMR 7.32(1)(d).

a. For a unit with a date for commencement of commercial operation as defined in subdivision 2. of this definition and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

b. For a unit with a date for commencement of commercial operation as defined in subdivision 2. of this definition and that is subsequently replaced by a unit at the same source (e.g., repowered), such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in subdivision 1. or 2. of this definition as appropriate.

Commence operation means:

1. To have begun any mechanical, chemical, or electronic process, including, with regard to a unit, start-up of a unit's combustion chamber.

2. For a unit that undergoes a physical change (other than replacement of the unit by a unit at the same source) after the date the unit commences operation as defined in subdivision 1. of this definition, such date shall remain the date of commencement of operation of the unit, which shall continue to be treated as the same unit.

3. For a unit that is replaced by a unit at the same source (e.g., repowered) after the date the unit commences operation as defined in subdivision 1. of this definition, such date shall remain the replaced unit's date of commencement of operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of operation as defined in subdivision 1. 2. or 3. of this definition as appropriate.

Common stack means a single flue through which emissions from 2 or more units are exhausted.

Compliance account means a CAIR NO_x Ozone Season Allowance Tracking System account, established by the Administrator for a CAIR NO_x Ozone Season source under 310 CMR 7.32(6), in which any CAIR NO_x Ozone Season allowance allocations for the CAIR NO_x Ozone Season units at the source are initially recorded and in which are held any CAIR NO_x Ozone Season allowances available for use for a control period in order to meet the source's CAIR NO_x Ozone Season emissions limitation in accordance with 310 CMR 7.32(6)(e).

Continuous emission monitoring system or CEMS means the equipment required under 310 CMR 7.32(8) to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes (using an automated data acquisition and handling system (DAHS)), a permanent record of nitrogen oxides emissions, stack gas volumetric flow rate, stack gas moisture content, and oxygen or carbon dioxide concentration (as applicable), in a manner consistent with 40 CFR Part 75. The following systems are the principal types of continuous emission monitoring systems required under 310 CMR 7.32(8):

1. A flow monitoring system, consisting of a stack flow rate monitor and an automated data acquisition and handling system and providing a permanent, continuous record of stack gas volumetric flow rate, in standard cubic feet per hour (scfh);
2. A nitrogen oxides concentration monitoring system, consisting of a NO_x pollutant concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of NO_x emissions, in parts per million (ppm);
3. A nitrogen oxides emission rate (or NO_x -diluent) monitoring system, consisting of a NO_x pollutant concentration monitor, a diluent gas (CO_2 or O_2) monitor, and an automated data acquisition and handling system and providing a permanent, continuous record of NO_x concentration, in parts per million (ppm), diluent gas concentration, in percent CO_2 or O_2, and NO_x emission rate, in pounds per million British thermal units (lb/MMBtu);
4. A moisture monitoring system, as defined in 40 CFR 75.11(b)(2) and providing a permanent, continuous record of the stack gas moisture content, in percent H_2O;
5. A carbon dioxide monitoring system, consisting of a CO_2 pollutant concentration monitor (or an oxygen monitor plus suitable mathematical equations from which the CO_2 concentration is derived) and an automated data acquisition and handling system and providing a permanent, continuous record of CO_2 emissions, in percent CO_2; and
6. An oxygen monitoring system, consisting of an O_2 concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of O_2 in percent O_2.

Control period or ozone season means the period beginning May 1 of a calendar year, except as provided in 310 CMR 7.32(1)(f)3.b., and ending on September 30 of the same year, inclusive.

Emissions means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the Administrator by the CAIR designated representative and as determined by the Administrator in accordance with 310 CMR 7.32(8).

Energy Efficiency Project or EEP means one or more of the following voluntary projects that directly result in energy savings at a facility located in Massachusetts:

1. The construction of a new building or addition that exceeds the requirements of the Massachusetts State Building Code, 780 CMR 1301.0 *et seq.*, *Energy Conservation*; or
2. The installation, replacement or modification of equipment, fixtures, or materials including without limitation:
    a. windows and doors;
    b. caulking and weather-stripping;
    c. insulation;
    d. automatic energy control systems;
    e. refrigeration equipment;
    f. hot water systems;
    g. equipment required to operate steam, hydraulic, and ventilation systems;
    h. plant and distribution systems including replacement of burners, furnaces or boilers;
    i. electrical or mechanical furnace ignition systems;
    j. lighting fixtures;
    k. energy recovery systems excluding landfill gas combustion, or municipal waste combustion systems;
    l. motors;
    m. variable speed drive installations on industrial fans and pumps; and
    n. combined heat and power systems that achieve an actual energy efficiency of 60%; or
3. The commencement or modification of building or facility operation and maintenance procedures.
4. Reductions in labor, load shifting, and any other measures that do not directly result in energy savings are not EEPs.
5. Projects resulting in energy savings for a CAIR NOx Ozone Season source are not EEPs.

Excess emissions means any ton of nitrogen oxides emitted by the CAIR NO_x Ozone Season units at a CAIR NO_x Ozone Season source during a control period that exceeds the CAIR NO_x Ozone Season emissions limitation for the source.

Existing CAIR NOx Ozone Season unit means for purposes of an allocation, any CAIR NOx Ozone Season unit that has operated and submitted output data for one entire control period under 310 CMR 7.27, 7.28, or 7.32 prior to the year in which the allocation takes place, unless that unit has subsequently been replaced

and determined to be a new unit for the year in which the allocation takes place pursuant to 310 CMR 7.32(5)(c)5.

Fossil fuel means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

Fossil-fuel-fired means, with regard to a unit, combusting any amount of fossil fuel in any calendar year.

Fossil-fuel-powered means the combustion of fossil fuel or any derivative of fossil fuel alone, or, in combination with any other fuel, if fossil fuel comprises more than 50% of the annual heat input on a Btu basis. Once a unit is considered fossil-fuel-powered, then the unit is always considered fossil-fuel-powered even if the fossil fuel no longer comprises more than 50% of the annual heat input on a Btu basis

Fuel oil means any petroleum-based fuel (including diesel fuel or petroleum derivatives such as oil tar) and any recycled or blended petroleum products or petroleum by-products used as a fuel whether in a liquid, solid, or gaseous state.

General account means a CAIR NO_x Ozone Season Allowance Tracking System account, established under 310 CMR 7.32(6), that is not a compliance account.

Generator means a device that produces electricity.

Gross electrical output means, with regard to a cogeneration unit, electricity made available for use, including any such electricity used in the power production process (which process includes, but is not limited to, any onsite processing or treatment of fuel combusted at the unit and any on-site emission controls).

Heat input means, with regard to a specified period of time, the product (in MMBtu/time) of the gross calorific value of the fuel (in Btu/lb) divided by 1,000,000 Btu/MMBtu and multiplied by the fuel feed rate into a combustion device (in lb of fuel/time), as measured, recorded, and reported to the Administrator by the CAIR designated representative and determined by the Administrator in accordance with 310 CMR 7.32(8) and excluding the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

Heat input rate means the amount of heat input (in MMBtu) divided by unit operating time (in hr) or, with regard to a specific fuel, the amount of heat input attributed to the fuel (in MMBtu) divided by the unit operating time (in hr) during which the unit combusts the fuel.

Hg Budget Trading Program means a multi-state Hg air pollution control and emission reduction program approved and administered by the Administrator in

accordance subpart HHHH of 40 CFR Part 60 and 40 CFR 60.24(h)(6), or established by the Administrator under section 111 of the Clean Air Act, as a means of reducing national Hg emissions.

Indirect Heat Exchanger means combustion equipment in which the flame or the products of combustion are separated from any contact with the principal material in the process by metallic or refractory walls. It includes, but is not limited to, steam boilers, vaporizers, melting pots, heat exchangers, column reboilers, fractioning column feed preheaters, reactor feed preheaters, fuel-fired reactors such as steam hydrocarbon reformer heaters and pyrolysis heaters.

Life-of-the-unit, firm power contractual arrangement means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy generated by any specified unit and pays its proportional amount of such unit's total costs, pursuant to a contract:

1. For the life of the unit;
2. For a cumulative term of no less than 30 years, including contracts that permit an election for early termination; or
3. For a period no less than 25 years or 70 percent of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

Maximum design heat input means the maximum amount of fuel per hour (in Btu/hr) that a unit is capable of combusting on a steady state basis as of the initial installation of the unit as specified by the manufacturer of the unit.

Monitoring system means any monitoring system that meets the requirements of subpart HHHH of this part, including a continuous emissions monitoring system, an alternative monitoring system, or an excepted monitoring system under 40 CFR Part 75.

Most stringent State or Federal NOx emissions limitation means, with regard to a unit, the lowest NO_x emissions limitation (in terms of lb/MMBtu) that is applicable to the unit under State or Federal law, regardless of the averaging period to which the emissions limitation applies.

Nameplate capacity means, starting from the initial installation of a generator, the maximum electrical generating output (in MWe) that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings) as of such installation as specified by the manufacturer of the generator or, starting from the completion of any subsequent physical change in the generator resulting in an increase in the maximum electrical generating output (in MWe) that the generator is capable of producing on a steady state basis and during continuous operation (when not

restricted by seasonal or other deratings), such increased maximum amount as of such completion as specified by the person conducting the physical change.

New CAIR NOx Ozone Season unit means for purposes of an allocation, any CAIR NOx Ozone Season unit which has not received an allocation under 310 CMR 7.32(5)(c)3. from the Department for the vintage year for which new unit allocations are being made.

Operating Permit means a permit issued under title V of the Clean Air Act and 40 CFR Part 70 or part 71 and 310 CMR 7.00: Appendix C.

Operating Permit regulations means the regulations that the Administrator has approved or issued as meeting the requirements of title V of the Clean Air Act and 40 CFR Part 70 or 71 at 310 CMR 7.00: Appendix C.

Operator means any person who operates, controls, or supervises a CAIR NO_x Ozone Season unit or a CAIR NO_x Ozone Season source and shall include, but not be limited to, any holding company, utility system, or plant manager of such a unit or source.

Owner means any of the following persons:

1. With regard to a CAIR NO_x Ozone Season source or a CAIR NO_x Ozone Season unit at a source, respectively:
    a. Any holder of any portion of the legal or equitable title in a CAIR NO_x Ozone Season unit at the source or the CAIR NO_x Ozone Season unit; or
    b. Any holder of a leasehold interest in a CAIR NO_x Ozone Season unit at the source or the CAIR NO_x Ozone Season unit; or
    c. Any purchaser of power from a CAIR NO_x Ozone Season unit at the source or the CAIR NO_x Ozone Season unit under a life-of-the-unit, firm power contractual arrangement; provided that, unless expressly provided for in a leasehold agreement, owner shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based (either directly or indirectly) on the revenues or income from such CAIR NO_x Ozone Season unit; or
2. With regard to any general account, any person who has an ownership interest with respect to the CAIR NO_x Ozone Season allowances held in the general account and who is subject to the binding agreement for the CAIR authorized account representative to represent the person's ownership interest with respect to CAIR NO_x Ozone Season allowances.

Permitting authority means the State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to issue or revise permits to meet the requirements of the CAIR NO_x Ozone Season Trading Program in accordance with 310 CMR 7.32(3) or, if no such agency has been so authorized, the Administrator.

Public Benefit Set-aside Baseline Period means any one of the three control periods as defined in 310 CMR 7.32 preceding the year in which the Energy Efficiency Project or Renewable Energy Project was first put in use or first became operational. Once CAIR NO_x Ozone Season allowances have been granted for a project, the same PBSA baseline period shall be used to calculate CAIR NO_x Ozone Season allowances for that project in any subsequent year.

Proponent means any person who owns, leases, operates or controls an Energy Efficiency Project or a Renewable Energy Project, or a party who aggregates one or more Renewable Energy Projects or Energy Efficiency Projects, to equal at least one whole CAIR NO_x Ozone Season allowance. Aggregators may include, without limitation, a common owner of projects, an energy service company, an emission trading broker, or a state or municipal entity.

Receive or receipt of means, when referring to the Department or the Administrator, to come into possession of a document, information, or correspondence (whether sent in hard copy or by authorized electronic transmission), as indicated in an official log, or by a notation made on the document, information, or correspondence, by the Department or the Administrator in the regular course of business.

Recordation, record, or recorded means, with regard to CAIR NO_x Ozone Season allowances, the movement of CAIR NO_x Ozone Season allowances by the Administrator into or between CAIR NO_x Ozone Season Allowance Tracking System accounts, for purposes of allocation, transfer, or deduction.

Reference method means any direct test method of sampling and analyzing for an air pollutant as specified in 40 CFR 75.22.

Renewable energy means energy generated by one or more of the following fuels, energy resources or technologies, and that does not emit NO_x: solar photovoltaic or solar thermal energy; wind energy; fuel cells that do not employ a fuel processor that emits NOx; ocean thermal, wave or tidal energy; hydro and geothermal energy. Energy generated from nuclear fuel, biomass, landfill gas, fuel cells that employ a fuel processor that emits NOx, and hydro using pumped storage are not renewable energy under 310 CMR 7.32.

Renewable Energy Project or REP means one or more generation units producing renewable energy that is either located in Massachusetts or adjacent to Massachusetts and directly and solely connected to transmission facilities located in Massachusetts. A REP may not receive PBSA CAIR NO_x Ozone Season allowances under 310 CMR 7.32 for energy generation that has been awarded NOx allowances under another program administered by the government of the United States, or any other political subdivision thereof.

Replacement, replace, or replaced means, with regard to a unit, the demolishing of a unit, or the permanent shutdown and permanent disabling of a unit, and the

construction of another unit (the replacement unit) to be used instead of the demolished or shutdown unit (the replaced unit).

Repowered means, with regard to a unit, replacement of a coal-fired boiler with one of the following coal-fired technologies at the same source as the coal-fired boiler:

1. Atmospheric or pressurized fluidized bed combustion;
2. Integrated gasification combined cycle;
3. Magnetohydrodynamics;
4. Direct and indirect coal-fired turbines;
5. Integrated gasification fuel cells; or
6. As determined by the Administrator in consultation with the Secretary of Energy, a derivative of one or more of the technologies under subdivisions 1. through 6. of this definition and any other coal-fired technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of January 1, 2005.

Sequential use of energy means:

1. For a topping-cycle cogeneration unit, the use of reject heat from electricity production in a useful thermal energy application or process; or
2. For a bottoming-cycle cogeneration unit, the use of reject heat from useful thermal energy application or process in electricity production.

Serial number means, for a CAIR NO_x Ozone Season allowance, the unique identification number assigned to each CAIR NO_x Ozone Season allowance by the Administrator.

Solid waste incineration unit means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine that is a ''solid waste incineration unit'' as defined in section 129(g)(1) of the Clean Air Act.

Source means all buildings, structures, or installations located in one or more contiguous or adjacent properties under common control of the same person or persons. For purposes of section 502(c) of the Clean Air Act, a ''source,'' including a ''source'' with multiple units, shall be considered a single ''facility.''

State means one of the States or the District of Columbia that adopts the CAIR NO_x Ozone Season Trading Program pursuant to 40 CFR 51.123(aa)(1) or (2), (bb), or (dd).

Submit or serve means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

1. In person;

2. By United States Postal Service; or
3. By other means of dispatch or transmission and delivery. Compliance with any ‘‘submission’’ or ‘‘service’’ deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.

Ton means 2,000 pounds. For the purpose of determining compliance with the CAIR NO_x Ozone Season emissions limitation, total tons of nitrogen oxides emissions for a control period shall be calculated as the sum of all recorded hourly emissions (or the mass equivalent of the recorded hourly emission rates) in accordance with 310 CMR 7.32(8), but with any remaining fraction of a ton equal to or greater than 0.50 tons deemed to equal one ton and any remaining fraction of a ton less than 0.50 tons deemed to equal zero tons.

Topping-cycle cogeneration unit means a cogeneration unit in which the energy input to the unit is first used to produce useful power, including electricity, and at least some of the reject heat from the electricity production is then used to provide useful thermal energy.

Total energy input means, with regard to a cogeneration unit, total energy of all forms supplied to the cogeneration unit, excluding energy produced by the cogeneration unit itself.

Total energy output means, with regard to a cogeneration unit, the sum of useful power and useful thermal energy produced by the cogeneration unit.

Unit means a stationary, fossil-fuel-fired or fossil-fuel-powered boiler or combustion turbine or other stationary, fossil-fuel-fired or fossil-fuel-powered combustion device.

Unit operating day means a calendar day in which a unit combusts any fuel.

Unit operating hour or hour of unit operation means an hour in which a unit combusts any fuel.

Useful power means, with regard to a cogeneration unit, electricity or mechanical energy made available for use, excluding any such energy used in the power production process (which process includes, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any onsite emission controls).

Useful thermal energy means:

1. For purposes of defining a cogeneration unit under 310 CMR 7.32 (1)(b), thermal energy that is:
    a. Made available to an industrial or commercial process (not a power production process), excluding any heat contained in condensate return or makeup water;

b. Used in a heating application (e.g., space heating or domestic hot water heating); or

c. Used in a space cooling application (i.e., thermal energy used by an absorption chiller).

2. For all other purposes, thermal energy that is:

a. Made available to an industrial or commercial process (not a power production process), excluding any heat contained in condensate return or makeup water;

b. Used in a heating application (e.g., space heating or domestic hot water heating);

c. Used in a space cooling application (i.e., thermal energy used by an absorption chiller); or

d. Used in an industrial or commercial manufacturing process or application.

Utility power distribution system means the portion of an electricity grid owned or operated by a utility and dedicated to delivering electricity to customers.

Vintage means the designated year of a CAIR NO_x Ozone Season allowance and is the year that a CAIR NO_x Ozone Season allowance can first be used by a CAIR NO_x Ozone Season unit to demonstrate compliance with 310 CMR 7.32.

Voluntary means an action that is not otherwise required by federal or Massachusetts law or the ordinance of any Massachusetts municipality.

(c) Measurements, abbreviations, and acronyms. Measurements, abbreviations, and acronyms used in 310 CMR 7.32 are defined as follows:

1. Btu--British thermal unit.
2. CO_2--carbon dioxide.
3. H_2O--water.
4. Hg--mercury.
5. hr--hour.
6. kW--kilowatt electrical.
7. kWh--kilowatt hour.
8. lb-pound.
9. MMBtu--million Btu.
10. MWe--megawatt electrical.
11. MWh--megawatt hour.
12. NO_x --nitrogen oxides.
13. O_2--oxygen.
14. ppm--parts per million.
15. cfh--standard cubic feet per hour.
16. SO_2--sulfur dioxide.
17. yr--year.

(d) Applicability.

1. Except as provided in 310 CMR 7.32(1)(d)2.:

a. The following units shall be CAIR NO_x Ozone Season units, and any source that includes one or more such units shall be a CAIR NO_x Ozone Season source, subject to the requirements of 310 CMR 7.32(1) through (9):

i. Any stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990 or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.

ii. Any fossil-fuel-powered boiler, combustion turbine or indirect heat exchanger that emits NO_x to a stack and has a maximum design heat input of 250 MMBtu/Hour or more, or a fossil-fuel-powered electric generating unit with a nameplate capacity of 15 MW or more.

b.

i. If a stationary boiler or stationary combustion turbine that, under 310 CMR 7.32(1)(d)1.a., is not a CAIR NO_x Ozone Season unit begins to combust fossil fuel or to serve a generator with nameplate capacity of more than 25 MWe producing electricity for sale, the unit shall become a CAIR NO_x Ozone Season unit as provided in 310 CMR 7.32(1)(d)1.a.i. on the first date on which it both combusts fossil fuel and serves such generator.

ii. If a boiler, combustion turbine or indirect heat exchanger unit that is not a CAIR NO_x Ozone Season unit begins to emit NOx to a stack, increases its maximum design heat input to 250 MMBtu/Hour or more, begins to serve a generator with nameplate capacity of 15 MWe or more, or becomes fossil-fuel-powered, the unit shall become a CAIR NOx Ozone Season unit as provided in 310 CMR 7.32(1)(d)1.a.ii. on the first date on which it meets the criteria established in 310 CMR 7.32(1)(d)1.a.ii.

2. The units in a State that meet the requirements set forth in 310 CMR 7.32(1)(d)2.a.i., 2.b.i., or 2.b.ii. shall not be CAIR NO_x Ozone Season units unless they qualify as CAIR NOx Ozone Season units under 310 CMR 7.32(1)(d)1.a.ii. or 1.b.ii.

a.

i. Any unit that is a CAIR NO_x Ozone Season unit under 310 CMR 7.32(1)(d)1.a or 1.b.:

(i) Qualifying as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a cogeneration unit; and

(ii) Not serving at any time, since the later of November 15, 1990 or the startup of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe supplying in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale.

ii. If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and

meets the requirements of 310 CMR 7.32(1)(d)2.a.i. for at least one calendar year, but subsequently no longer meets all such requirements, the unit shall become a CAIR NO_x Ozone Season unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a cogeneration unit or January 1 after the first calendar year during which the unit no longer meets the requirements of 310 CMR 7.32(1)(d)2.a.i.ii.

b.

i. Any unit that is a CAIR NO_x Ozone Season unit under 310 CMR 7.32(1)(d)1.a. or 1.b. commencing operation before January 1, 1985:

(i) Qualifying as a solid waste incineration unit; and

(ii) With an average annual fuel consumption of non-fossil fuel for 1985–1987 exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any 3 consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).

ii. Any unit that is a CAIR NO_x Ozone Season unit under 310 CMR 7.32(1)(d)1.a. or 1.b. commencing operation on or after January 1, 1985:

(i) Qualifying as a solid waste incineration unit; and

(ii) With an average annual fuel consumption of non-fossil fuel for the first 3 calendar years of operation exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any 3 consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).

iii. If a unit qualifies as a solid waste incineration unit and meets the requirements of 310 CMR 7.32(1)(d)2.b.i. or 2.b.ii. of this division for at least 3 consecutive calendar years, but subsequently no longer meets all such requirements, the unit shall become a CAIR NO_x Ozone Season unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a solid waste incineration unit or January 1 after the first 3 consecutive calendar years after 1990 for which the unit has an average annual fuel consumption of fossil fuel of 20 percent or more.

(e) Retired unit exemption.

1.

a. Any CAIR NO_x Ozone Season unit that is permanently retired shall be exempt from the CAIR NO_x Ozone Season Trading Program, except for the provisions of 310 CMR 7.32(1)(e), (1)(b), (1)(c), (1)(d), (1)(f)3.d. through g., (1)(g), (1)(h), (2), and (5) through (7).

b. The exemption under 310 CMR 7.32(1)(e)1.a. shall become effective the day on which the CAIR NO_x Ozone Season unit is permanently retired. Within 30 days of the unit's permanent retirement, the CAIR designated representative shall submit a statement to the Department otherwise responsible for administering any CAIR permit for the unit and shall submit a copy of the statement to the Administrator. The statement shall state, in a format prescribed by the Department, that the unit was

permanently retired on a specific date and will comply with the requirements of 310 CMR 7.32(1)(e)2.

c. After receipt of the statement under 310 CMR 7.32(1)(e)1.b., the Department will amend any permit under 310 CMR 7.32(3) covering the source at which the unit is located to add the provisions and requirements of the exemption under 310 CMR 7.32(1)(e)1.a. and 1.b.

2. Special provisions.

a. A unit exempt under 310 CMR 7.32(1)(e)1. shall not emit any nitrogen oxides, starting on the date that the exemption takes effect.

b. The Department will allocate CAIR NO_x Ozone Season allowances under 310 CMR 7.32(5) to a unit exempt under 310 CMR 7.32(1)(e)1. until the unit no longer qualifies for CAIR NO_x Ozone Season allowances.

c. For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under 310 CMR 7.32(1)(e)1. shall retain, at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time before the end of the period, in writing by the Department or the Administrator. The owners and operators bear the burden of proof that the unit is permanently retired.

d. The owners and operators and, to the extent applicable, the CAIR designated representative of a unit exempt under 310 CMR 7.32(1)(e)1. shall comply with the requirements of the CAIR NO_x Ozone Season Trading Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

e. A unit exempt under 310 CMR 7.32(1)(e)1. and located at a source that is required, or but for this exemption would be required, to have an Operating Permit shall not resume operation unless the CAIR designated representative of the source submits a complete CAIR permit application under division (3)(c) for the unit not less than 18 months (or such lesser time provided by the Department) before the later of January 1, 2009 or the date on which the unit resumes operation.

f. On the earlier of the following dates, a unit exempt under 310 CMR 7.32(1)(e)1. shall lose its exemption:

i. The date on which the CAIR designated representative submits a CAIR permit application for the unit under 310 CMR 7.32(1)(e)2.e.;

ii. The date on which the CAIR designated representative is required under 310 CMR 7.32(1)(e)2.e. to submit a CAIR permit application for the unit; or

iii. The date on which the unit resumes operation, if the CAIR designated representative is not required to submit a CAIR permit application for the unit.

g. For the purpose of applying monitoring, reporting, and recordkeeping requirements under subsection 310 CMR 7.32(8) of this section, a unit that loses its exemption under 310 CMR 7.32(1)(e)1. shall be treated as a

unit that commences commercial operation on the first date on which the unit resumes operation.

(f) Standard requirements.

1. Permit requirements.

a. The CAIR designated representative of each CAIR NO_x Ozone Season source shall:

i. Submit to the Department a complete CAIR permit application under 310 CMR 7.32(3)(c) in accordance with the deadlines specified in 310 CMR 7.32(3)(b); and

ii. Submit in a timely manner any supplemental information that the Department determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

b. The owners and operators of each CAIR NO_x Ozone Season source shall have a CAIR permit issued by the Department under 310 CMR 7.32(3) for the source and operate the source and the unit in compliance with such CAIR permit.

2. Monitoring, reporting, and recordkeeping requirements.

a. The owners and operators, and the CAIR designated representative, of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 310 CMR 7.32(8).

b. The emissions measurements recorded and reported in accordance with 310 CMR 7.32(8) shall be used to determine compliance by each CAIR NO_x Ozone Season source with the CAIR NO_x Ozone Season emissions limitation under 310 CMR 7.32(1)(f)3.

c. The energy output measurements recorded and reported in accordance with 310 CMR 7.32(9) shall be used to determine CAIR NO_x Ozone Season allocations for each CAIR NO_x Ozone Season source under 310 CMR 7.32(5).

3. Nitrogen oxides ozone season emission requirements.

a. As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the control period under 310 CMR 7.32(6)(e)1. in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x Ozone Season units at the source, as determined in accordance with 310 CMR 7.32(8).

b. A CAIR NO_x Ozone Season unit shall be subject to the requirements under 310 CMR 7.32(1)(f)3.a. for the control period starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under 310 CMR 7.32(8)(a)2.a., b., c., or g. and for each control period thereafter.

c. A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under 310 CMR 7.32(1)(f)3.a., for a

control period in a calendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated.

d. CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance Tracking System accounts in accordance with 310 CMR 7.32(5), (6), and (7).

e. A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 310 CMR 7.32(1)(e) and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

f. A CAIR NO_x Ozone Season allowance does not constitute a property right.

g. Upon recordation by the Administrator under 310 CMR 7.32(5), (6), and (7), every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

4. Excess emissions requirements. If a CAIR NO_x Ozone Season source emits nitrogen oxides during any control period in excess of the CAIR NO_x Ozone Season emissions limitation, then the owners and operators of the source and each CAIR NO_x Ozone Season unit at the source shall surrender the CAIR NO_x Ozone Season allowances required for deduction under 310 CMR 7.32(6)(e)4.a. and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.

5. Recordkeeping and reporting requirements.

a. Unless otherwise provided, the owners and operators of the CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Department or the Administrator.

i. The certificate of representation under 310 CMR 7.32(2)(d) for the CAIR designated representative for the source and each CAIR NO_x Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 310 CMR 7.32(2)(d) changing the CAIR designated representative.

ii. All emissions monitoring information, in accordance with 310 CMR 7.32(8), provided that to the extent that 310 CMR 7.32(8)

provides for a 3-year period for recordkeeping, the 3-year period shall apply.

iii. Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Ozone Season Trading Program.

iv. Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Ozone Season Trading Program.

b. The CAIR designated representative of a CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall submit the reports required under the CAIR NO_x Ozone Season Trading Program, including those under 310 CMR 7.32(8).

6. Liability.

a. Each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit shall meet the requirements of the CAIR NO_x Ozone Season Trading Program.

b. Any provision of the CAIR NO_x Ozone Season Trading Program that applies to a CAIR NO_x Ozone Season source or the CAIR designated representative of a CAIR NO_x Ozone Season source shall also apply to the owners and operators of such source and of the CAIR NO_x Ozone Season units at the source.

c. Any provision of the CAIR NO_x Ozone Season Trading Program that applies to a CAIR NO_x Ozone Season unit or the CAIR designated representative of a CAIR NO_x Ozone Season unit shall also apply to the owners and operators of such unit.

7. Effect on other authorities. No provision of the CAIR NO_x Ozone Season Trading Program, a CAIR permit application, a CAIR permit, or an exemption under 310 CMR 7.32(1)(e) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x Ozone Season source or CAIR NO_x Ozone Season unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, the Clean Air Act, or any other state regulation.

(g) Computation of time.

1. Unless otherwise stated, any time period scheduled, under the CAIR NO_x Ozone Season Trading Program, to begin on the occurrence of an act or event shall begin on the day the act or event occurs.

2. Unless otherwise stated, any time period scheduled, under the CAIR NO_x Ozone Season Trading Program, to begin before the occurrence of an act or event shall be computed so that the period ends the day before the act or event occurs.

3. Unless otherwise stated, if the final day of any time period, under the CAIR NO_x Ozone Season Trading Program, falls on a weekend or a State or Federal holiday, the time period shall be extended to the next business day.

(h) Appeal procedures. The appeal procedures for decisions of the Administrator under the CAIR NO_x Ozone Season Trading Program are set forth in 40 CFR Part 78.

(2) CAIR Designated Representative for CAIR NO_x Ozone Season Sources.

(a) Authorization and responsibilities of CAIR designated representative.

1. Except as provided under 310 CMR 7.32(2)(b), each CAIR NO_x Ozone Season source, including all CAIR NO_x Ozone Season units at the source, shall have one and only one CAIR designated representative, with regard to all matters under the CAIR NO_x Ozone Season Trading Program concerning the source or any CAIR NO_x Ozone Season unit at the source.

2. The CAIR designated representative of the CAIR NO_x Ozone Season source shall be selected by an agreement binding on the owners and operators of the source and all CAIR NO_x Ozone Season units at the source and shall act in accordance with the certification statement in 310 CMR 7.32(2)(d)1.d.iv.

3. Upon receipt by the Administrator of a complete certificate of representation under 310 CMR 7.32(2)(d), the CAIR designated representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the CAIR NO_x Ozone Season source represented and each CAIR NO_x Ozone Season unit at the source in all matters pertaining to the CAIR NO_x Ozone Season Trading Program, notwithstanding any agreement between the CAIR designated representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the CAIR designated representative by the Department, the Administrator, or a court regarding the source or unit.

4. No CAIR permit will be issued, no emissions data reports will be accepted, and no CAIR NO_x Ozone Season Allowance Tracking System account will be established for a CAIR NO_x Ozone Season unit at a source, until the Administrator has received a complete certificate of representation under 310 CMR 7.32(2)(d) for a CAIR designated representative of the source and the CAIR NO_x Ozone Season units at the source.

5.

a. Each submission under the CAIR NO_x Ozone Season Trading Program shall be submitted, signed, and certified by the CAIR designated representative for each CAIR NO_x Ozone Season source on behalf of which the submission is made. Each such submission shall include the following certification statement by the CAIR designated representative: ‘‘I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant

penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.''

b. The Department and the Administrator will accept or act on a submission made on behalf of owner or operators of a CAIR NO_x Ozone Season source or a CAIR NO_x Ozone Season unit only if the submission has been made, signed, and certified in accordance with 310 CMR 7.32(2)5.a.

(b) Alternate CAIR designated representative.

1. A certificate of representation under 310 CMR 7.32(2)(d) may designate one and only one alternate CAIR designated representative, who may act on behalf of the CAIR designated representative. The agreement by which the alternate CAIR designated representative is selected shall include a procedure for authorizing the alternate CAIR designated representative to act in lieu of the CAIR designated representative.

2. Upon receipt by the Administrator of a complete certificate of representation under 310 CMR 7.32(2)(d), any representation, action, inaction, or submission by the alternate CAIR designated representative shall be deemed to be a representation, action, inaction, or submission by the CAIR designated representative.

3. Except in 310 CMR 7.32(1)(b), (2)(a)1. and 4., (2)(b), (2)(c), (2)(d), (2)(f), and (6)(b), whenever the term ''CAIR designated representative'' is used in 310 CMR 7.32(1) through (9), the term shall be construed to include the CAIR designated representative or any alternate CAIR designated representative.

(c) Changing CAIR designated representative and alternate CAIR designated representative; changes in owners and operators.

1. Changing CAIR designated representative. The CAIR designated representative may be changed at any time upon receipt by the Administrator of a superseding complete certificate of representation under 310 CMR 7.32(2)(d). Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CAIR designated representative before the time and date when the Administrator receives the superseding certificate of representation shall be binding on the new CAIR designated representative and the owners and operators of the CAIR NO_x Ozone Season source and the CAIR NO_x Ozone Season units at the source.

2. Changing alternate CAIR designated representative. The alternate CAIR designated representative may be changed at any time upon receipt by the Administrator of a superseding complete certificate of representation under 310 CMR 7.32(2)(d). Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate CAIR designated representative before the time and date when the Administrator receives the superseding certificate of representation shall be binding on the new alternate CAIR designated representative and the owners and operators of the CAIR NO_x Ozone Season source and the CAIR NO_x Ozone Season units at the source.

3. Changes in owners and operators.

a. In the event an owner or operator of a CAIR NO_x Ozone Season source or a CAIR NO_x Ozone Season unit is not included in the list of owners and operators in the certificate of representation under division (2)(d), such owner or operator shall be deemed to be subject to and bound by the certificate of representation, the representations, actions, inactions, and submissions of the CAIR designated representative and any alternate CAIR designated representative of the source or unit, and the decisions and orders of the Department, the Administrator, or a court, as if the owner or operator were included in such list.

b. Within 30 days following any change in the owners and operators of a CAIR NO_x Ozone Season source or a CAIR NO_x Ozone Season unit, including the addition of a new owner or operator, the CAIR designated representative or any alternate CAIR designated representative shall submit a revision to the certificate of representation under 310 CMR 7.32(2)(d) amending the list of owners and operators to include the change.

(d) Certificate of representation.

1. A complete certificate of representation for a CAIR designated representative or an alternate CAIR designated representative shall include the following elements in a format prescribed by the Administrator:

a. Identification of the CAIR NO_x Ozone Season source, and each CAIR NO_x Ozone Season unit at the source, for which the certificate of representation is submitted, including identification and nameplate capacity of each generator served by each such unit.

b. The name, address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the CAIR designated representative and any alternate CAIR designated representative.

c. A list of the owners and operators of the CAIR NO_x Ozone Season source and of each CAIR NO_x Ozone Season unit at the source.

d. The following certification statements by the CAIR designated representative and any alternate CAIR designated representative—

i. ‘‘I certify that I was selected as the CAIR designated representative or alternate CAIR designated representative, as applicable, by an agreement binding on the owners and operators of the source and each CAIR NO_x Ozone Season unit at the source.’’

ii. ‘‘I certify that I have all the necessary authority to carry out my duties and responsibilities under the CAIR NO_x Ozone Season Trading Program on behalf of the owners and operators of the source and of each CAIR NO_x Ozone Season unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions.’’

iii. ‘‘I certify that the owners and operators of the source and of each CAIR NO_x Ozone Season unit at the source shall be bound by any order issued to me by the Administrator, the Department, or a court regarding the source or unit.’’

iv. ‘‘Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, a CAIR NO_x Ozone Season unit, or where a

utility or industrial customer purchases power from a CAIR NO_x Ozone Season unit under a life-of-the unit, firm power contractual arrangement, I certify that: I have given a written notice of my selection as the 'CAIR designated representative' or 'alternate CAIR designated representative', as applicable, and of the agreement by which I was selected to each owner and operator of the source and of each CAIR NO_x Ozone Season unit at the source; and CAIR NO_x Ozone Season allowances and proceeds of transactions involving CAIR NO_x Ozone Season allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of CAIR NO_x Ozone Season allowances by contract, CAIR NO_x Ozone Season allowances and proceeds of transactions involving CAIR NO_x Ozone Season allowances will be deemed to be held or distributed in accordance with the contract.''

e. The signature of the CAIR designated representative and any alternate CAIR designated representative and the dates signed.

2. Unless otherwise required by the Department or the Administrator, documents of agreement referred to in the certificate of representation shall not be submitted to the Department or the Administrator. Neither the Department nor the Administrator shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

(e) Objections concerning CAIR designated representative.

1. Once a complete certificate of representation under 310 CMR 7.32(2)(d) has been submitted and received, the Department and the Administrator will rely on the certificate of representation unless and until a superseding complete certificate of representation under 310 CMR 7.32(2)(d) is received by the Administrator.

2. Except as provided in 310 CMR 7.32(2)(c)1. or 2., no objection or other communication submitted to the Department or the Administrator concerning the authorization, or any representation, action, inaction, or submission, of the CAIR designated representative shall affect any representation, action, inaction, or submission of the CAIR designated representative or the finality of any decision or order by the Department or the Administrator under the CAIR NO_x Ozone Season Trading Program.

3. Neither the Department nor the Administrator will adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of any CAIR designated representative, including private legal disputes concerning the proceeds of CAIR NO_x Ozone Season allowance transfers.

(f) Delegation by CAIR designated representative and alternate CAIR designated representative.

1. A CAIR designated representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this part.

2. An alternate CAIR designated representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this part.

3. In order to delegate authority to make an electronic submission to the Administrator in accordance with 310 CMR 7.32(2)(f)1. or 2., the CAIR designated representative or alternate CAIR designated representative, as appropriate, must submit to the Administrator a notice of delegation, in a format prescribed by the Administrator, that includes the following elements:

a. The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of such CAIR designated representative or alternate CAIR designated representative;

b. The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of each such natural person (referred to as an ''agent'');

c. For each such natural person, a list of the type or types of electronic submissions under 310 CMR 7.32(2)(f)1. or 2. for which authority is delegated to him or her; and

d. The following certification statements by such CAIR designated representative or alternate CAIR designated representative:

i. ''I agree that any electronic submission to the Administrator that is by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am a CAIR designated representative or alternate CAIR designated representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 310 CMR 7.32(2)(f)4. shall be deemed to be an electronic submission by me.''

ii. ''Until this notice of delegation is superseded by another notice of delegation under 310 CMR 7.32(2)(f)4., I agree to maintain an e-mail account and to notify the Administrator immediately of any change in my e-mail address unless all delegation of authority by me under 310 CMR 7.32(2)(f) is terminated.''.

4. A notice of delegation submitted under 310 CMR 7.32(2)(f)3. shall be effective, with regard to the CAIR designated representative or alternate CAIR designated representative identified in such notice, upon receipt of such notice by the Administrator and until receipt by the Administrator of a superseding notice of delegation submitted by such CAIR designated representative or alternate CAIR designated representative, as appropriate. The superseding notice of delegation may replace any previously identified agent, add a new agent, or eliminate entirely any delegation of authority.

5. Any electronic submission covered by the certification in 310 CMR 7.32(2)(f)3.d.i. and made in accordance with a notice of delegation effective under 310 CMR 7.32(2)(f)4. shall be deemed to be an electronic submission by the CAIR designated representative or alternate CAIR designated representative submitting such notice of delegation.

(3) Permits.

(a) General CAIR NO_x Ozone Season Trading Program permit requirements.

1. Each CAIR NO_x Ozone Season source shall have a CAIR permit.

2. For each CAIR NO_x Ozone Season source required to have an Operating Permit under 310 CMR 7.00: Appendix C, such Operating Permit shall include a CAIR permit administered by the Department. The CAIR portion of the Operating Permit shall be administered in accordance with the Department's Operating Permit regulations promulgated under 310 CMR 7.00: Appendix C, except as provided otherwise by 310 CMR 7.32(1)(e) and (3).

3. Each CAIR permit shall contain, with regard to the CAIR NO_x Ozone Season source and the CAIR NO_x Ozone Season units at the source covered by the CAIR permit, all applicable CAIR NO_x Ozone Season Trading Program requirements and shall be a complete and separable portion of the Operating Permit.

(b) Submission of CAIR permit applications.

1. Duty to apply. The CAIR designated representative of any CAIR NO_x Ozone Season source required to have an Operating Permit shall submit to the Department a complete CAIR permit application under 310 CMR 7.32(3)(c) for the source covering each CAIR NO_x Ozone Season unit at the source at least 18 months (or such lesser time provided by the Department) before the later of January 1, 2009 or the date on which the CAIR NO_x Ozone Season unit commences commercial operation.

2. Duty to Reapply. For a CAIR NO_x Ozone Season source required to have an Operating Permit, the CAIR designated representative shall submit a complete CAIR permit application under 310 CMR 7.32(3)(c) for the source covering each CAIR NO_x Ozone Season unit at the source to renew the CAIR permit in accordance with the Department's Operating Permits regulations addressing permit renewal.

(c) Information requirements for CAIR permit applications. A complete CAIR permit application shall include the following elements concerning the CAIR NO_x Ozone Season source for which the application is submitted, in a format prescribed by the Department:

1. Identification of the CAIR NO_x Ozone Season source;

2. Identification of each CAIR NO_x Ozone Season unit at the CAIR NO_x Ozone Season source;

3. The standard requirements under 310 CMR 7.32(1)(f); and,

4. An energy output monitoring plan.

   a. The output monitoring plan shall propose a method for quantification of net energy output, including:

      i. A diagram that includes the following features where applicable:

         (i) If the CAIR NO_x Ozone Season unit monitors net electric output, the diagram shall contain all CAIR NO_x Ozone Season units and all generators served by each CAIR NO_x Ozone Season unit and the relationship between CAIR NO_x Ozone Season units and generators. If a generator served by a CAIR NO_x Ozone Season unit is also served by a non-affected unit, the non-affected unit and its relationship to each generator shall be indicated on the

diagram as well. The diagram shall indicate where the net electric output is measured and shall include all electrical inputs and outputs to and from the CAIR NO_x Ozone Season source. If net electric output is determined using a billing meter, the diagram shall show each billing meter used to determine net sales of electricity and shall show that all electricity measured at the point of sale is generated by the CAIR NO_x Ozone Season units.

(ii) If the CAIR NO_x Ozone Season unit monitors net thermal output, the diagram shall include all steam or hot water coming into the net steam system, including steam from CAIR NO_x Ozone Season units and non-affected units, and all exit points of steam or hot water from the net steam system. In addition, each input and output stream shall have an estimated temperature, pressure and phase indicator, and an enthalpy in Btu/lb. The diagram of the net steam system shall identify all useful loads, house loads, parasitic loads, any other steam loads and all boiler feedwater returns. The diagram shall represent all energy losses in the system as either usable or unusable losses. The diagram shall also indicate all flow meters, temperature or pressure sensors or other equipment used to calculate gross thermal output. If a sales agreement is used to determine net thermal output, the diagram shall show the monitoring equipment used to determine the sales of steam.

ii. A description of each output monitoring system. The description of the output monitoring system shall include a written description of the output system and the equations used to calculate output. For net thermal output systems descriptions and justifications of each useful load shall be included.

iii. A detailed description of all quality assurance/quality control activities that will be performed to maintain the output system in accordance with 310 CMR 7.32(9)(b).

iv. Documentation supporting any output value(s) to be used as a missing data value should there be periods of invalid output data. The missing data output value shall be either zero or an output value that is likely to be lower than a measured value and that is approved as part of the monitoring plan required under 310 CMR 7.32(3)(c)4.

b. CAIR NO_x Ozone Season sources selling steam should use billing meters to determine net steam output. A CAIR NO_x Ozone Season source whose steam output is not measured by billing meters or whose steam output is combined with output from a non-affected unit prior to measurement by the billing meter shall propose to the Department an alternative method for quantification of net steam output. If data for steam output are not available, the CAIR NO_x Ozone Season source may report heat input providing useful steam output as a surrogate for steam output.

(d) CAIR permit contents and term.

1. Each CAIR permit will contain, in a format prescribed by the Department, all elements required for a complete CAIR permit application under 310 CMR 7.32(3)(c).

2. Each CAIR permit is deemed to incorporate automatically the definitions of terms under 310 CMR 7.32(1)(b) and, upon recordation by the Administrator under 310 CMR 7.32(6) or (7), every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from the compliance account of the CAIR NO_x Ozone Season source covered by the permit.

3. The term of the CAIR permit will be set by the Department, as necessary to facilitate coordination of the renewal of the CAIR permit with issuance, revision, or renewal of the CAIR NO_x Ozone Season source's Operating Permit or other federally enforceable permit as applicable.

(e) CAIR permit revisions. Except as provided in 310 CMR 7.32(3)(d)2., the Department will revise the CAIR permit, as necessary. If the facility is required to have an Operating Permit under 310 CMR 7.00: Appendix C, such Operating Permit shall be modified upon approval of the revision to the CAIR permit in accordance with the procedures in 310 CMR 7.00: Appendix C(8).

(4) [Reserved]

(5) CAIR NO_x Ozone Season Allowance Allocations.

(a) State trading budgets. The Massachusetts trading budget for annual allocations of CAIR NO_x Ozone Season allowances for each control period in 2009 through 2014 is 7,913 tons of NOx, and 6,655 tons of NOx for each control period thereafter.

(b) Timing requirements for CAIR NO_x Ozone Season allowance allocations.

1. On or before April 30, 2007, the Department will submit to the Administrator the CAIR NO_x Ozone Season allowance allocations for the control periods in 2009 through 2011, in a format prescribed by the Administrator and in accordance with 310 CMR 7.32(5)(c)3.

2. On or before October 31, 2008 and October 31 of each year thereafter, the Department will submit to the Administrator the CAIR NO_x Ozone Season allowance allocations for existing CAIR NO_x Ozone Season units, in a format prescribed by the Administrator and in accordance with 310 CMR 7.32(5)(c)3., for the control period in the fourth year after the year of the applicable deadline for submission under 310 CMR 7.32(5)(b)2.

3. On or before July 31, 2009 and July 31 of each year thereafter, the Department will submit to the Administrator the CAIR NO_x Ozone Season allowance allocations from the New Unit Set-aside, in a format prescribed by the Administrator and in accordance with 310 CMR 7.32(5)(c)1., for the control period in the year of submission under 310 CMR 7.32(5)(b)3.

4. On or before October 31, 2009 and October 31 of each year thereafter, the Department will submit to the Administrator the CAIR NO_x Ozone Season allowance allocations from the Public Benefit Set-aside, in a format prescribed by the Administrator and in accordance with 310 CMR

7.32(5)(c)2., for the control period in the year of submission under 310 CMR 7.32(5)(b)4.

(c) CAIR NO_x Ozone Season allowance allocations.

1. New Unit Set-aside.

a. General Provisions

i. From each CAIR NO_x Ozone Season allowance vintage, the Department will allocate 5% of the Massachusetts state trading budget to a New Unit Set-aside account. New Massachusetts' CAIR NO_x Ozone Season units may request CAIR NO_x Ozone Season allowances from this New Unit Set-aside account and the Department will allocate CAIR NO_x Ozone Season allowances from the New Unit Set-aside account to the new CAIR NO_x Ozone Season units according to the procedures in 310 CMR 7.32(5)(c)1.b. If, in total, new CAIR NO_x Ozone Season units request more CAIR NO_x Ozone Season allowances than are available in the New Unit Set-aside account that calendar year, including those available under 310 CMR 7.32(5)(c)1.a.ii., and excluding those allocated under 310 CMR 7.32(5)(c)1.b.ii(ii), then CAIR NO_x Ozone Season allowances will be allocated to the new CAIR NO_x Ozone Season units by the Department pro rata based on net control period electrical and useful steam output.

ii. In any calendar year, if new CAIR NO_x Ozone Season units request more CAIR NO_x Ozone Season allowances than are available in the New Unit Set-aside account, then a maximum of 2% of the Massachusetts state trading budget may be transferred from the Public Benefit Set-aside account to the New Unit Set-aside account to satisfy new CAIR NO_x Ozone Season units' requests. CAIR NO_x Ozone Season allowances requested under 310 CMR 7.32(5)(c)2. will be allocated before any transfers to the New Unit Set-aside can be made.

iii. Unused CAIR NO_x Ozone Season allowances allocated to the New Unit Set-aside will be banked in the New Unit Set-aside account. If the number of banked CAIR NO_x Ozone Season allowances in the New Unit Set-aside account is 10% or more of the total Massachusetts state trading budget after the Administrator completes the annual deduction process under 310 CMR 7.32(6)(e), then any banked CAIR NO_x Ozone Season allowances in excess of 5% of the Massachusetts state trading budget will be allocated to existing CAIR NO_x Ozone Season units in accordance with 310 CMR 7.32(5)(c)3.b.x.

iv. After a new CAIR NO_x Ozone Season unit has operated for one complete control period the Department will allocate CAIR NO_x Ozone Season allowances for the control period commencing four years in the future according to 310 CMR 7.32(5)(c)3. The unit will continue to receive CAIR NO_x Ozone Season allowances from the New Unit Set-aside for each control period according to 310 CMR

7.32(5)(c)1. until the first control period it is allocated pursuant to 310 CMR 7.32(5)(c)3.

v. The Department will calculate the allocation for each control period and on or before July 7 of each year forward a draft spreadsheet containing all new CAIR NO_x Ozone Season units' allocations, including output data and calculations, to new CAIR NO_x Ozone Season units. This action will commence a comment period ending July 17, during which new CAIR NO_x Ozone Season units may notify the Department of any errors in the output data and the calculation of the allocations contained in the spreadsheet. If the Department receives any comments, or does not receive the information required under 310 CMR 7.32(5)(c)1.b.ii.(ii), and makes revisions to the spreadsheet, then it will provide a 5-day comment period on the revised spreadsheet. The Department will post the final allocation on the Department website and send it to the Administrator and new CAIR NO_x Ozone Season units on or before July 31 of each year.

b. Allocation process

i. Any person who owns, leases, operates or controls a new CAIR NO_x Ozone Season unit may request that the Department allocate CAIR NO_x Ozone Season allowances to the unit from the New Unit Set-aside account. No later than May 1 of each year, each CAIR NO_x Ozone Season unit may request that the Department allocate CAIR NO_x Ozone Season allowances to that unit.

ii. Beginning in 2009, on or after July 31 of each year, the Department will allocate and report to the Administrator CAIR NO_x Ozone Season allowances to be recorded from the New Unit Set-aside account to new CAIR NO_x Ozone Season units as follows:

(i) For CAIR NO_x Ozone Season units with one or more full ozone season(s) of operation:

-1. For electric generation:

$$UUA1(y) = \frac{MWh(y\text{-}1) * 1.5 \text{ lbs/MWh}}{2000 \text{ lbs/ton}}$$

$$UUA2(y) = UUA1(y) * PAME(y)$$

Where:

UUA1 = Unit's Unadjusted Allocation;

UUA2 = Unit's Unadjusted Allocation adjusted to match existing units' allocation factor;

MWh = Actual net electric output for the control period in year y-1 in megawatt hours;

PAME(y) = the prorated allocation multiplier for existing CAIR NO_x Ozone Season units in year y, calculated in 310 CMR 7.32(5)(c)3.

-2. For steam generation:

$$UUA1(y) = \frac{SO(y\text{-}1) * 0.44 \text{ lbs/MMBtu output}}{2000 \text{ lbs/ton}}$$

$$UUA2(y) = UUA1(y) * PAME(y)$$

Where:

SO = Actual net steam output for the control period in year y-1 in MMBtu.

-3. If the sum of all UUA2(y) is greater than the number of CAIR NO_x Ozone Season allowances available for allocation, then:

$$PAMN(y) = \frac{\text{CAIR } NO_x \text{ Ozone Season Allowances available for allocation to New Units excluding those allocated under 310 CMR 7.32(5)(c)1.b.ii(ii)}}{\text{sum of all UUA2(y)}}$$

$$UAA(y) = UUA2(y) * PAMN(y)$$

Where:

PAMN(y) = the prorated allocation multiplier for new CAIR NO_x Ozone Season units in year y;

UAA = Unit’s Adjusted Allocation, a unit's allocation, adjusted to match existing units’ allocation factor and adjusted so the total new unit control period allocation does not exceed the CAIR NO_x Ozone Season allowances available for allocation to new CAIR NO_x Ozone Season units.

-4. If the sum of all UUA2(y) is less than or equal to the number of CAIR NO_x Ozone Season allowances available for allocation, then:

$$UAA(y) = UUA2(y)$$

-5. For CAIR NO_x Ozone Season units with both electrical and useful steam output, the Department will add the number of CAIR NO_x Ozone Season allowances allocated for each type of output together to determine the total.

(ii) CAIR NO_x Ozone Season units with less than one full ozone season of operation shall receive CAIR NO_x Ozone Season allowances equal to their maximum ozone season NO_x emissions permitted in accordance with 310 CMR 7.02, 310 CMR 7.00: Appendix A or the Prevention of Significant Deterioration (PSD) Program, whichever is lowest, as long as they submit proof of the following on or before July 17:

-1. the CAIR NO_x Ozone Season unit has commenced operation; and

-2. electronic data for second calendar quarter NO_x emissions has been submitted to the Administrator for the CAIR NO_x Ozone Season unit.

(iii) The adjusted allocation for each CAIR NO_x Ozone Season source is calculated by summing the adjusted allocation of each source's new CAIR NO_x Ozone Season units. Each CAIR NO_x Ozone Season source's allocation is then rounded to the nearest whole number. If the total number of rounded adjusted CAIR NO_x Ozone Season allowances sums to a number that is below or above the number of CAIR NO_x Ozone Season allowances available, additional CAIR NO_x Ozone Season allowances are added to or subtracted from the CAIR NO_x Ozone Season sources whose decimal portion of their adjusted allocation is closest to 0.5, to ensure the total number of rounded adjusted CAIR NO_x Ozone Season allowances sums to the number of CAIR NO_x Ozone Season allowances available.

2. Public Benefit Set-aside.

a. The Department will annually allocate 5% of the Massachusetts state trading budget to a Public Benefit Set-aside (PBSA) account to provide for allocation of CAIR NO_x Ozone Season allowances for Energy Efficiency Projects (EEPs) and Renewable Energy Projects (REPs).

b. In any calendar year, if the Department approves the allocation of more CAIR NO_x Ozone Season allowances for EEPs and REPs than are available in the PBSA account, then a maximum of 2% of the Massachusetts state trading budget may be transferred from the New Unit Set-aside account to the PBSA account, if available. The Department will allocate CAIR NO_x Ozone Season allowances to the new CAIR NOx

Ozone Season sources as requested under 310 CMR 7.32(5)(c)1. before it transfers any surplus new CAIR NOx Ozone Season source CAIR NO_x Ozone Season allowances to the PBSA account.

c. In any calendar year, if the Department approves the allocation of more CAIR NO_x Ozone Season allowances than are available in the PBSA account for that calendar year, including those surplus New Unit Set-aside CAIR NO_x Ozone Season allowances transferred pursuant to 310 CMR 7.32(5)(c)2.b., then CAIR NO_x Ozone Season allowances will be allocated to all PBSA projects for that year on a pro rata basis.

d. Unused CAIR NO_x Ozone Season allowances allocated to the PBSA account will be banked in the PBSA account. If the number of banked CAIR NO_x Ozone Season allowances in the PBSA account is 10% or more of the total Massachusetts state trading budget after the Administrator completes the annual deduction process under 310 CMR 7.32(6)(e), then any banked CAIR NO_x Ozone Season allowances in excess of 5% of the Massachusetts state trading budget will be allocated to existing CAIR NOx Ozone Season units in accordance with 310 CMR 7.32(5)(c)3.b.x.

e. PBSA CAIR NO_x Ozone Season Allowance Calculations. To calculate the number of CAIR NO_x Ozone Season allowances that may be allocated under 310 CMR 7.32(5)(c)2., a proponent shall use one of the following formulae, except that other reliable and replicable methods of quantification acceptable to the Department may also be used for projects that in the aggregate do not exceed five PBSA CAIR NO_x Ozone Season allowances:

i. REPs Generating Electrical Energy.

CAIR NO_x Ozone Season allowances = (MWh * 1.5 lbs/MWh) / (2000 lbs/ton);

Where MWh is the net electrical energy generated by a renewable energy project.

ii. REPs Generating Useful Net Thermal Energy.

CAIR NO_x Ozone Season allowances = (MMBtu output * 0.44 lb/MMBtu output) / (2000 lbs/ton);

Where MMBtu output is the useful net thermal energy generated by the REP.

iii. EEPs Saving Electrical Energy.

(i) CAIR NO_x Ozone Season allowances = (MWh * 1.5 lbs/MWh) / (2000 lbs/ton);

Where MWh is the amount of electrical energy saved by the EEP.

(ii) Except as provided in 310 CMR 7.32(5)(c)2.e.iii.(iii), the amount of electrical energy saved shall be calculated by comparing, (a) the amount of electrical energy consumed during the control period in the calendar year preceding the year in which the application is submitted, to (b) the amount of electrical energy consumed during the PBSA baseline period. If monthly data for energy consumed is not available, then energy savings shall be calculated by comparing the energy consumed during the calendar years corresponding to the periods described in 310 CMR 7.32(5)(c)2.e.iii.(ii) multiplied by five-twelfths.

(iii) For the construction of a new building or addition that exceeds the requirements of 780 CMR 1301.0 *et seq.*, *Energy Conservation*, the amount of electrical energy saved shall be calculated by comparing, (a) the amount of electrical energy consumed during the first full control period immediately preceding the year the application is submitted, to (b) the amount of electrical energy that would have been consumed at the same occupancy level during the control period if the building or addition had been constructed according to 780 CMR 1301.0 *et seq*., *Energy Conservation*. If monthly data for energy consumed is not available then energy savings shall be calculated by comparing the energy consumed during the calendar years corresponding to the periods described in 310 CMR 7.32(5)(c)2.e.iii.(iii) multiplied by five-twelfths.

iv. <u>EEPs Saving Thermal Energy.</u>

(i) CAIR NO_x Ozone Season Allowances = (MMBtu output * 0.44 lb/MMBtu output) / (2000 lbs/ton);

Where MMBtu output is the amount of thermal energy saved by the EEP.

(ii) Except as provided in 310 CMR 7.32(5)(c)2.e.iv.(iii), the amount of thermal energy saved shall be calculated by comparing, (a) the amount of thermal energy consumed during the control period in the calendar year preceding the year in which the application is submitted, to (b) the amount of thermal energy consumed during the PBSA baseline period. If monthly data for energy consumed is not available, then energy savings shall be calculated by comparing the energy consumed during the calendar years corresponding to the periods described in 310 CMR 7.32(5)(c)2.e.iv.(ii) multiplied by five-twelfths.

(iii) For the construction of a new building or addition that exceeds the requirements of 780 CMR 1301.0 *et seq.*, *Energy Conservation*, the amount of thermal energy saved shall be calculated by comparing, (a) the amount of thermal energy consumed during the first full control period immediately preceding the year the application is submitted, to (b) the amount

of thermal energy that would have been consumed at the same occupancy level during the control period if the building or addition had been constructed according to 780 CMR 1301.0 *et seq.*, *Energy Conservation*. If monthly data for energy consumed is not available then energy savings shall be calculated by comparing the energy consumed during the calendar years corresponding to the periods described in 310 CMR 7.32(5)(c)2.e.iv.(iii) multiplied by five-twelfths.

v. EEPs Saving Thermal or Mechanical Energy in a Manufacturing Process Where Energy Consumption is Measured on a Unit of Production Basis.

A unit of production as used in this formula may include manufactured items, raw, intermediate, or final materials including steam, or other products measured in discrete units and produced as a result of the consumption of energy in a specific process or piece of equipment (e.g., a natural gas compressor).

CAIR NO_x Ozone Season Allowances = (((Et1/Pt1) - (Et2/Pt2)) * Pt2* NPt2 * (NPt1/NPt2)) / (2000 lbs/ton);

Where Et1 = Energy consumed during the PBSA baseline period in MMBtu. If monthly data is not available for the control period, then Et1 = the amount of energy consumed during any one of the three calendar years before the year in which the EEP was first put in use or first became operational multiplied by five-twelfths;

Pt1 = Units of product produced per PBSA baseline period. If monthly data is not available for the control period, then Pt1 = the units of product produced during any one of the three calendar years before the year in which the EEP was first put in use or first became operational, multiplied by five-twelfths;

NPt1 = NO_x emitted during the consumption of energy, measured in pounds per MMBtu heat input during the PBSA baseline period. If monthly data is not available for the control period, then NPt1 = NO_x emitted during any one of the three calendar years before the year in which the EEP was first put in use or first became operational, multiplied by five-twelfths.

Et2 = Energy consumed during the control period in the year before the calendar year in which the application is submitted. If monthly data is not available for the control period, then Et2 = energy consumed during the calendar year before the year in which the application is submitted, multiplied by five-twelfths.

Pt2 = Units of product produced during the control period in the year before the calendar year in which the application is submitted. If monthly data is not available for the control period then Pt2 = units of product produced during the calendar year before the year in which the application is submitted, multiplied by five-twelfths.

NPt2 = NOx emitted during the consumption of energy, measured in pounds per MMBtu heat input during the control period in the year before the calendar year in which the application is submitted. If monthly data is not available for the control period then NPt2 = NO_x emitted during the calendar year before the year in which the application is submitted, multiplied by five-twelfths.

vi. EEPs That are Combined Heat and Power Systems With Actual Energy Efficiency Equal to or Greater Than 60%.

(i) For purposes of determining when a combined heat and power system meets 60% Actual Energy Efficiency, Actual Energy Efficiency shall be based on the combined heat and power system, and calculated using the following formula:

Eff% = (NEO + UTO) / GEI;

Where:

Eff% = Actual energy efficiency;

NEO = Net useful electrical energy output of the system converted to British thermal units, (Btus) per unit of time;

UTO = Net useful thermal energy output, or the energy output in Btus of thermal energy used for heating, cooling, industrial processes, or other beneficial uses, per unit of time; and

GEI = Gross energy input, based upon the higher heating value of fuel, in Btus per unit of time.

(ii) CAIR NO_x Ozone Season allowances = ([NO_x conventional] – [NO_x CHP system]) / (2,000 lbs/ton)

Where:

[NOx conventional] = (kWh * (3,412 Btu/kWh) / 0.34 + HeatOut / 0.8) / 1,000,000 * (0.15 lbs NO_x/MMBtu);

[NO_x CHP system] = BtuIn / 1,000,000 * NO_xRate;

kWh = The number of kilowatt-hours of net electrical energy generated by the system during the PBSA baseline period. If monthly data is not available for the PBSA baseline period, then the number of kilowatt-hours of net electrical energy generated by the system during any one of the three calendar years before the year in which the system first generated energy, multiplied by five-twelfths;

HeatOut = The number of British thermal units (Btu) of net useful thermal energy used by the system for space, water, or industrial process heat during a control period. If monthly data is not available for the control period, then HeatOut = the number of British thermal units (Btu) of net useful thermal energy used by the system for space, water, or industrial process heat during a calendar year, multiplied by five-twelfths;

BtuIn = The heat input of fuel used by the system to produce electrical or thermal energy during the PBSA baseline period. If monthly data is not available for the PBSA baseline period, then BtuIn = the heat input of fuel used by the system to produce electrical or thermal energy during any one of the three calendar years before the year during which the system first generated energy, multiplied by five-twelfths; and

NO_xRate = NO_x emitted in normal system operation by the project (lbs NO_x/MMBtu).

vii. If the sum of all projects' PBSA CAIR NO_x Ozone Season allowances is greater than the number of CAIR NO_x Ozone Season allowances available for allocation, then each project's allocation is adjusted as follows:

$$\text{PAA} = \text{Project's allocation} * \frac{\text{CAIR } NO_x \text{ Ozone Season allowances available for allocation to PBSA projects}}{\text{sum of all projects' PBSA CAIR } NO_x \text{ Ozone Season allowances}}$$

Where:

PAA = Project's Adjusted Allocation, a project's allocation, adjusted so the total PBSA control period allocation does not exceed the CAIR NO_x Ozone Season allowances available.

viii. If the sum of all projects' PBSA CAIR NO_x Ozone Season allowances is less than or equal to the number of CAIR NO_x Ozone

Season allowances available for allocation, no adjustment is needed to ensure that too many PBSA CAIR NO_x Ozone Season allowances are not allocated.

ix. The adjusted allocation for each proponent is calculated by taking the sum of the adjusted allocation of each proponent's projects. Each proponent's allocation is then rounded to the nearest whole number. If the total number of rounded adjusted CAIR NO_x Ozone Season allowances is below or above the number of CAIR NO_x Ozone Season allowances available, additional CAIR NO_x Ozone Season allowances are added to or subtracted from the proponents whose decimal portion of their adjusted allocation is closest to 0.5, to ensure the total number of rounded adjusted CAIR NO_x Ozone Season allowances sums to the number of CAIR NO_x Ozone Season allowances available.

f. Measurement and Verification. Measurements of the amount of energy saved or generated by each project:

i. shall adhere to the International Performance Measurement and Verification Protocol, March 2002, DOE/GO-102002-1554, (IPMVP), or U.S. EPA's Conservation Verification Protocol; and

ii. shall adhere to the measurement and verification provisions of ISO New England Operating Procedure No. 18 "Metering and Telemetering Criteria" or other provisions acceptable to the Department; and

iii. shall make normalization adjustments for energy savings in accordance with the IPMVP, (e.g., to correct for increases in lighting capacity in a defined office space, or for weather conditions causing increased or decreased load demands); and,

iv. may include without limitation, thermodynamic steam table energy extrapolations; the American Society of Mechanical Engineers' Standard for Measurement of Fluid Flow in Pipes Using Orifice, Nozzle, and Venturi, (ASME MFC-3M-1989); manufacturers' efficiency specifications for useful energy determinations, or other measurement and verification protocols acceptable to the Department.

g. PBSA Procedures.

i. Each proponent shall establish a CAIR NO_x Ozone Season Allowance Tracking System account with the Administrator in accordance with 310 CMR 7.32(6)(b).

ii. All applications for CAIR NO_x Ozone Season allowances shall:

(i) be submitted on the Department's Public Benefit Set Aside NO_x Allowance Application form;

(ii) describe the project, and explain how the amount of energy saved or generated has been measured, verified and calculated, and has been apportioned between multiple proponents;

(iii) provide any additional information requested by the Department, including without limitation, site information, plans,

specifications, drawings, calculations and operation and maintenance procedures; and,

(iv) include the following certification signed by a responsible official:

As the project proponent, or the person fully authorized to make this certification on behalf of the project proponent, I certify that I personally examined the foregoing information, am familiar with the information contained in this application and any attachments thereto and that, based on my inquiry of those persons immediately responsible for obtaining the information, I believe that the information contained in this application, including without limitation the quantification of the total amount of energy generated or saved by the project, is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment.

h. Timing of CAIR NO_x Ozone Season Allowances.

i. Project Start Date. Only REPs that were built and began generating energy and EEPs that were built and in use, or installed and operational, after December 31, 1999 are eligible for CAIR NO_x Ozone Season allowances from the PBSA account.

ii. Application Submission. Proponents shall submit applications for PBSA CAIR NO_x Ozone Season allowances to the Department on or before August 1 of each year. The designated year of the PBSA CAIR NO_x Ozone Season allowances allocated will correspond to the calendar year in which the application is submitted. The allocation will be based on the energy saved or generated in the calendar year preceding the year in which the application is submitted.

iii. Annual Applications. A proponent may request CAIR NO_x Ozone Season allowances for only one year at a time. A separate application shall be submitted annually for each year during which an REP generates energy or an EEP saves energy.

iv. Useful Life of EEPs. An EEP is only eligible for CAIR NO_x Ozone Season allowances for energy saved during the seven years immediately following the year during which the EEP was first put in use (in the case of new buildings and additions), was first installed (in the case of materials) or first became operational (in the case of equipment or procedures).

i. General Provisions.

i. Limitation. If more than one proponent submits an application for CAIR NO_x Ozone Season allowances for the same energy saved or generated, the Department, at its discretion, may disapprove the CAIR NO_x Ozone Season allowances for which more than one application has been received. To ensure that proponents are not applying for the same energy saved or generated, proponents shall document the proponent project costs incurred, by indicating and calculating the participant cost divided by the sum of: participant

costs; sales, technical assistance, and training costs; and customer incentives.

ii. Aggregation. Proponents may submit an application that aggregates two or more REPs or EEPs that individually result in less than one CAIR NO_x Ozone Season allowance, but that equal at a minimum one whole CAIR NO_x Ozone Season allowance when aggregated. The Department will not allocate CAIR NO_x Ozone Season allowances for REPs or EEPs totaling less than one whole CAIR NO_x Ozone Season allowance.

iii. Banking and Transferring. CAIR NO_x Ozone Season allowances from the PBSA account may be banked in accordance with 310 CMR 7.32(6)(f) or transferred in accordance with 310 CMR 7.32(7).

iv. Whole CAIR NO_x Ozone Season Allowances. All CAIR NO_x Ozone Season allowances shall be allocated, transferred, or used as whole CAIR NO_x Ozone Season allowances. To determine the number of whole CAIR NO_x Ozone Season allowances, the number of CAIR NO_x Ozone Season allowances shall be rounded down for decimals less than 0.5 and rounded up for decimals of 0.5 or greater. Requests for less than 1 CAIR NO_x Ozone Season allowance may not be rounded up to 1.0.

v. Relationship to Air Pollution Control Regulations. Proponents applying for CAIR NO_x Ozone Season allowances from the PBSA account are not required to apply for Emission Control Plans or Operating Permits solely on account of said application.

vi. Relationship to Other Laws. Proponents shall comply with all applicable state and federal laws and regulations, including without limitation, M.G.L. c. 93A (regarding the Regulation of Business Practices for Consumer Protection); M.G.L. c. 164 (regarding the Manufacture and Sale of Gas and Electricity); 940 CMR 19.00 *et seq.* the regulations of the Office of the Attorney General regarding the Retail Marketing and Sale of Electricity, and 220 CMR 11.00 *et seq.*, the Rules Governing the Restructuring of the Electric Industry. Subject to 310 CMR 7.32(5)(c)2.i.vi., nothing in 310 CMR 7.32(5)(c)2. shall be construed to limit any rights under M.G.L. c. 164.

3. Allocation process for existing CAIR NO_x Ozone Season units.

a. General Provisions.

i. For each control period in 2009 and thereafter, the Department will allocate to existing Massachusetts' CAIR NO_x Ozone Season units a total amount of CAIR NO_x Ozone Season allowances equal to the tons of NO_x emissions in the State trading budget under 310 CMR 7.32(5)(a) minus those CAIR NO_x Ozone Season allowances allocated to the New Unit Set-aside and PBSA in accordance with 310 CMR 7.32(5)(c)1.a.i. and 2.a. (except as provided in 310 CMR 7.32(5)(c)3.b.x.).

ii. Beginning with the allocation for the 2012 control period, and for each control period thereafter, CAIR designated representatives shall report control period output data for all CAIR NO_x Ozone Season units on an electronic template approved by the Department. After receiving output data from the CAIR designated representatives, the Department will calculate the allocation for the particular control period and forward a draft spreadsheet containing all of the CAIR NO_x Ozone Season units' allocations, including output data and calculations, to the CAIR designated representative for each CAIR NO_x Ozone Season unit. The Department will notice and provide a 30-day comment period during which CAIR NO_x Ozone Season units may notify the Department of any errors in the output data and the calculation of the allocations contained in the spreadsheet. If the Department receives any comments and makes revisions to the spreadsheet, then it will provide a 10-day comment period on the revised spreadsheet. The Department will post the final allocation on the Department website and send it to the Administrator and CAIR NO_x Ozone Season units on or before October 31 of each year.

b. Allocation Process. The Department will allocate CAIR NO_x Ozone Season allowances to existing CAIR NO_x Ozone Season units using the following formulae:

i. For electricity generation:

$$UUA(y) = \frac{AEO(y)* 1.5 \text{ lbs/MWh}}{2000 \text{ lbs/ton}}$$

Where: UUA is a CAIR NO_x Ozone Season unit's unadjusted allocation for year y

AEO is a CAIR NO_x Ozone Season unit's average net electric output in MWh as determined in vi., vii., and viii. below.

ii. For useful steam generation:

$$UUA(y) = \frac{ASO(y)* 0.44 \text{ lbs/MMBtu output}}{2000 \text{ lbs/ton}}$$

Where: ASO is a CAIR NO_x Ozone Season unit's average net useful steam output in MMBtu as determined in vi., vii., and viii. below.

iii. For CAIR NO_x Ozone Season units with both electrical and useful steam output, the Department will add the number of CAIR NO_x Ozone Season allowances allocated for each type of output together to determine the total.

iv. A CAIR NO_x Ozone Season unit's adjusted allocation (UAA) will be calculated from the UUA as follows:

$$PAME(y) = \frac{\text{CAIR } NO_x \text{ Ozone Season allowances available for allocation to existing CAIR NOx Ozone Season units}}{\text{sum of all UUA(y)}}$$

$$UAA(y) = UUA(y) * PAME(y)$$

Where: PAME(y) = the prorated allocation multiplier for existing CAIR NO_x Ozone Season units in year y.

v. The adjusted allocation for each CAIR NO_x Ozone Season source is calculated by summing the adjusted allocation of each source's existing CAIR NO_x Ozone Season units. Each CAIR NO_x Ozone Season source's allocation is then rounded to the nearest whole number. If the total number of rounded adjusted CAIR NO_x Ozone Season allowances sums to a number that is below or above the number of CAIR NO_x Ozone Season allowances available, additional CAIR NO_x Ozone Season allowances are added to or subtracted from the CAIR NO_x Ozone Season sources whose decimal portion of their adjusted allocation is closest to 0.5, to ensure the total number of rounded adjusted CAIR NO_x Ozone Season allowances sums to the number of CAIR NO_x Ozone Season allowances available.

vi. For CAIR NO_x Ozone Season units with 3 full control periods of historical output, the Department will determine AEO and ASO according to the following formulae:

AEO(y) = net electric output in MWh for the average of the two highest control periods 7, 6 and 5 years prior to year y

ASO(y) = net useful steam output in MMBtu for the average of the two highest control periods 7, 6 and 5 years prior to year y

vii. For CAIR NOx Ozone Season units with two full control periods of historical output the Department will determine AEO and ASO according to the following formulae:

AEO(y) = average net electrical output in MWh for the two full control periods 6 and 5 years prior to year y

ASO(y) = average useful steam output in MMBtu for the two full control periods 6 and 5 years prior to year y

viii. For CAIR NOx Ozone Season units with only one full control period of historical output the Department will determine AEO and ASO according to the following formulae:

AEO(y) = net electrical output in MWh for the one full control period 5 years prior to year y

ASO(y) = useful steam output in MMBtu for the one full control period 5 years prior to year y

ix. After a unit has commenced operation, every control period is included in determining the number of full control periods of historical operation, including control periods with an electrical or useful steam output of zero.

x. If CAIR NO_x Ozone Season allowances are designated for allocation to existing CAIR NO_x Ozone Season units from the New Unit Set-aside or the PBSA under 310 CMR 7.32(5)(c)1.a.iii. or 310 CMR 7.32(5)(c)2d., the Department will allocate for each CAIR NO_x Ozone Season allowance vintage year to each existing CAIR NO_x Ozone Season unit an amount of CAIR NO_x Ozone Season allowances equal to the total amount of such designated unallocated CAIR NO_x Ozone Season allowances, multiplied by the unit's allocation for the allowance vintage year under 310 CMR 7.32(5)(c)3., divided by the total number of CAIR NO_x Ozone Season allowances allocated to existing CAIR NO_x Ozone Season units for the allowance vintage year pursuant to 310 CMR 7.32(5)(a), and rounded to the nearest whole CAIR NO_x Ozone Season allowance in accordance with 310 CMR 7.32(5)(c)3.b.v.

xi. For control periods 2009 through 2011, the existing CAIR NO_x Ozone Season sources will receive allocations based on the procedures in 310 CMR 7.32(5)(c)3.b.i. through ix., but using output data for 2004 through 2006. These allocations are listed in table A, below. Beginning with the allocation for control period 2012, the existing CAIR NO_x Ozone Season sources in Table 1 will be allocated CAIR NO_x Ozone Season allowances according to the procedures in 310 CMR 7.32(5)(c)3.b.i. through x.

310 CMR 7.32(5)(c)3. *TABLE A* CAIR NO_x Ozone Season Allowance Allocations for 2009 - 2011		
NAME	ORIS Code	CAIR NO_x Ozone Season Allowances
ANP Bellingham Energy Company	55211	389
ANP Blackstone Energy Company	55212	421
Bellingham Cogen	10307	216
Berkshire Power	55041	203
Blackstone Street	1594	10
Brayton Point	1619	1208
Canal Station	1599	648
Cleary Flood	1682	9
Dartmouth Power	52026	34
Deer Island Treatment	10823	3
Dighton	55026	108
Doreen	1631	0
Fore River	55317	585
Framingham Station	1586	0
GE Aircraft Engines Lynn	10029	14
Kendall Square	1595	282
Kneeland Station	880023	98
Lowell Cogeneration	10802	0
Lowell Power	54586	0
Masspower	10726	149
Medway Station	1592	0
Milford Power	54805	62
Millennium Power Partners	55079	310
MIT Central Utility	54907	84

Mount Tom	1606	136
Mystic	1588	1404
New Boston	1589	80
Pepperell	10522	0
Pittsfield Generating	50002	50
Potter	1660	3
Salem Harbor	1626	391
Somerset	1613	128
South Boston Combustion Turbines	10176	1
Stony Brook	6081	63
Waters River	1678	7
West Springfield	1642	25
Woodland	1643	0

4. If a person who owns, leases, operates or controls a CAIR NO_x Ozone Season unit reduces the CAIR NO_x Ozone Season unit's emissions, and transfers those emission reductions under 310 CMR 7.00: *Appendix* A or B to a unit not subject to 310 CMR 7.32 or another NO_x allowance trading program approved by the Administrator, the transferor must surrender or retire CAIR NO_x Ozone Season allowances equal to the emission reductions used each year. This surrender or retirement will not be required if the use occurs after a unit becomes subject to 310 CMR 7.32 or another NO_x allowance trading program approved by the Administrator.

5.

a. Any person who owns, leases, operates or controls a new CAIR NO_x Ozone Season unit that replaced an existing CAIR NO_x Ozone Season unit, as determined by the Department, must choose one of the following options before the new CAIR NO_x Ozone Season unit commences operation:

i. receive CAIR NO_x Ozone Season allowances under 310 CMR 7.32(5)(c)1. as a new unit, and remit CAIR NO_x Ozone Season allowances equal to the allocation for the existing CAIR NO_x Ozone Season unit to the Department, if already allocated; or,

ii. retain the allocation for the existing CAIR NO_x Ozone Season unit, and receive no CAIR NO_x Ozone Season allowances from the Department's New Unit Set-aside account for the new CAIR NO_x Ozone Season unit.

b. If the person who owns, leases, operates or controls the new CAIR NO_x Ozone Season unit does not indicate to the Department before the

unit commences operation which option in 310 CMR 7.32(5)(c)5.a. is chosen, the Department will choose an option.

(d) After providing notice and an opportunity for public comment, the Department may condition, limit, suspend or terminate any CAIR NO_x Ozone Season allowance or the authorization to emit that a CAIR NO_x Ozone Season allowance represents.

(6) CAIR NO_x Ozone Season Allowance Tracking System.

(a) [Reserved]

(b) Establishment of accounts.

1. Compliance accounts. Upon receipt of a complete certificate of representation under 310 CMR 7.32(2)(d), the Administrator will establish a compliance account for the CAIR NO_x Ozone Season source for which the certificate of representation was submitted, unless the source already has a compliance account.

2. General accounts.

a. Application for general account.

i. Any person may apply to open a general account for the purpose of holding and transferring CAIR NO_x Ozone Season allowances. An application for a general account may designate one and only one CAIR authorized account representative and one and only one alternate CAIR authorized account representative who may act on behalf of the CAIR authorized account representative. The agreement by which the alternate CAIR authorized account representative is selected shall include a procedure for authorizing the alternate CAIR authorized account representative to act in lieu of the CAIR authorized account representative.

ii. A complete application for a general account shall be submitted to the Administrator and shall include the following elements in a format prescribed by the Administrator:

(i) Name, mailing address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the CAIR authorized account representative and any alternate CAIR authorized account representative;

(ii) Organization name and type of organization, if applicable;

(iii) A list of all persons subject to a binding agreement for the CAIR authorized account representative and any alternate CAIR authorized account representative to represent their ownership interest with respect to the CAIR NO_x Ozone Season allowances held in the general account;

(iv) The following certification statement by the CAIR authorized account representative and any alternate CAIR authorized account representative: ‘‘I certify that I was selected as the CAIR authorized account representative or the alternate CAIR authorized account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to CAIR NO_x Ozone Season allowances held in the

general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the CAIR NO_x Ozone Season Trading Program on behalf of such persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any order or decision issued to me by the Administrator or a court regarding the general account.''

(v) The signature of the CAIR authorized account representative and any alternate CAIR authorized account representative and the dates signed.

iii. Unless otherwise required by the Department or the Administrator, documents of agreement referred to in the application for a general account shall not be submitted to the Department or the Administrator. Neither the Department nor the Administrator shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

b. Authorization of CAIR authorized account representative and alternate CAIR authorized account representative.

i. Upon receipt by the Administrator of a complete application for a general account under 310 CMR 7.32(6)(b)2.a.:

(i) The Administrator will establish a general account for the person or persons for whom the application is submitted.

(ii) The CAIR authorized account representative and any alternate CAIR authorized account representative for the general account shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each person who has an ownership interest with respect to CAIR NO_x Ozone Season allowances held in the general account in all matters pertaining to the CAIR NO_x Ozone Season Trading Program, notwithstanding any agreement between the CAIR authorized account representative or any alternate CAIR authorized account representative and such person. Any such person shall be bound by any order or decision issued to the CAIR authorized account representative or any alternate CAIR authorized account representative by the Administrator or a court regarding the general account.

(iii) Any representation, action, inaction, or submission by any alternate CAIR authorized account representative hall be deemed to be a representation, action, inaction, or submission by the CAIR authorized account representative.

ii. Each submission concerning the general account shall be submitted, signed, and certified by the CAIR authorized account representative or any alternate CAIR authorized account representative for the persons having an ownership interest with respect to CAIR NO_x Ozone Season allowances held in the general account. Each such submission shall include the following certification statement by the CAIR authorized account representative

or any alternate CAIR authorized account representative: ‘‘I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the CAIR NO_x Ozone Season allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.’’

iii. The Administrator will accept or act on a submission concerning the general account only if the submission has been made, signed, and certified in accordance with 310 CMR 7.32(6)(b)2.b.ii.

c. Changing CAIR authorized account representative and alternate CAIR authorized account representative; changes in persons with ownership interest.

i. The CAIR authorized account representative for a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under 310 CMR 7.32(6)(b)2.a. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CAIR authorized account representative before the time and date when the Administrator receives the superseding application for a general account shall be binding on the new CAIR authorized account representative and the persons with an ownership interest with respect to the CAIR NO_x Ozone Season allowances in the general account.

ii. The alternate CAIR authorized account representative for a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under 310 CMR 7.32(6)(b)2.a. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate CAIR authorized account representative before the time and date when the Administrator receives the superseding application for a general account shall be binding on the new alternate CAIR authorized account representative and the persons with an ownership interest with respect to the CAIR NO_x Ozone Season allowances in the general account.

iii.

(i) In the event a person having an ownership interest with respect to CAIR NO_x Ozone Season allowances in the general account is not included in the list of such persons in the application for a general account, such person shall be deemed to be subject to and bound by the application for a general account,

the representation, actions, inactions, and submissions of the CAIR authorized account representative and any alternate CAIR authorized account representative of the account, and the decisions and orders of the Administrator or a court, as if the person were included in such list.

(ii) Within 30 days following any change in the persons having an ownership interest with respect to CAIR NO_x Ozone Season allowances in the general account, including the addition of a new person, the CAIR authorized account representative or any alternate CAIR authorized account representative shall submit a revision to the application for a general account amending the list of persons having an ownership interest with respect to the CAIR NO_x Ozone Season allowances in the general account to include the change.

d. Objections concerning CAIR authorized account representative and alternate CAIR authorized account representative.

i. Once a complete application for a general account under 310 CMR 7.32(6)(b)2.a. of this division has been submitted and received, the Administrator will rely on the application unless and until a superseding complete application for a general account under 310 CMR 7.32(6)(b)2.a. is received by the Administrator.

ii. Except as provided in 310 CMR 7.32(6)(b)2.c.i. or 2.c.ii., no objection or other communication submitted to the Administrator concerning the authorization, or any representation, action, inaction, or submission of the CAIR authorized account representative or any alternate CAIR authorized account representative for a general account shall affect any representation, action, inaction, or submission of the CAIR authorized account representative or any alternate CAIR authorized account representative or the finality of any decision or order by the Administrator under the CAIR NO_x Ozone Season Trading Program.

iii. The Administrator will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of the CAIR authorized account representative or any alternate CAIR authorized account representative for a general account, including private legal disputes concerning the proceeds of CAIR NO_x Ozone Season allowance transfers.

e. Delegation by CAIR authorized account representative and alternate CAIR authorized account representative.

i. A CAIR authorized account representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under 310 CMR 7.32(6) and (7).

ii. An alternate CAIR authorized account representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under 310 CMR 7.32(6) and (7).

iii. In order to delegate authority to make an electronic submission to the Administrator in accordance with 310 CMR 7.32(6)(b)2.e.i. or 2.e.ii. the CAIR authorized account representative or alternate CAIR authorized account representative, as appropriate, must submit to the Administrator a notice of delegation, in a format prescribed by the Administrator, that includes the following elements:

(i) The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of such CAIR authorized account representative or alternate CAIR authorized account representative;

(ii) The name, address, e-mail address, telephone number, and, facsimile transmission number (if any) of each such natural person (referred to as an ‘‘agent’’);

(iii) For each such natural person, a list of the type or types of electronic submissions under 310 CMR 7.32(6)(b)2.e.i. or 2.e.ii. for which authority is delegated to him or her;

(iv) The following certification statement by such CAIR authorized account representative or alternate CAIR authorized account representative: ‘‘I agree that any electronic submission to the Administrator that is by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am a CAIR authorized account representative or alternate CAIR authorized representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 310 CMR 7.32(6)(b)2.e.iv. shall be deemed to be an electronic submission by me.’’; and

(v) The following certification statement by such CAIR authorized account representative or alternate CAIR authorized account representative: ‘‘Until this notice of delegation is superseded by another notice of delegation under 310 CMR 7.32(6)(b)2.e.iv., I agree to maintain an email account and to notify the Administrator immediately of any change in my e-mail address unless all delegation of authority by me under 310 CMR 7.32(6)(b)2.e. is terminated.’’.

iv. A notice of delegation submitted under 310 CMR 7.32(6)(b)2.e.iii. shall be effective, with regard to the CAIR authorized account representative or alternate CAIR authorized account representative identified in such notice, upon receipt of such notice by the Administrator and until receipt by the Administrator of a superseding notice of delegation submitted by such CAIR authorized account representative or alternate CAIR authorized account representative, as appropriate. The superseding notice of delegation may replace any previously identified agent, add a new agent, or eliminate entirely any delegation of authority.

v. Any electronic submission covered by the certification in 310 CMR 7.32(6)(b)2.e.iii.(iv) and made in accordance with a notice of

delegation effective under 310 CMR 7.32(6)(b)2.e.iv. shall be deemed to be an electronic submission by the CAIR designated representative or alternate CAIR designated representative submitting such notice of delegation.

3. Account identification. The Administrator will assign a unique identifying number to each account established under 310 CMR 7.32(6)(b)1. or 2.

(c) Responsibilities of CAIR authorized account representative. Following the establishment of a CAIR NO_x Ozone Season Allowance Tracking System account, all submissions to the Administrator pertaining to the account, including, but not limited to, submissions concerning the deduction or transfer of CAIR NO_x Ozone Season allowances in the account, shall be made only by the CAIR authorized account representative for the account.

(d) Recordation of CAIR NO_x Ozone Season allowance allocations.

1. On or before September 30, 2007, the Administrator will record in the CAIR NO_x Ozone Season source's compliance account the CAIR NO_x Ozone Season allowances allocated for the existing CAIR NO_x Ozone Season units at the source, as submitted by the Department in accordance with 310 CMR 7.32(5)(b)1., for the control periods in 2009, 2010, and 2011.

2. On or before December 1, 2008 and December 1 of each year thereafter, the Administrator will record in the CAIR NO_x Ozone Season source's compliance account the CAIR NO_x Ozone Season allowances allocated for the existing CAIR NO_x Ozone Season units at the source, as submitted by the Department in accordance with 310 CMR 7.32(5)(b)2., for the control period in the fourth year after the year of the applicable deadline for recordation under this paragraph.

3. On or before September 1, 2009 and September 1 of each year thereafter, the Administrator will record in the CAIR NO_x Ozone Season source's compliance account the CAIR NO_x Ozone Season allowances allocated for the new CAIR NO_x Ozone Season units at the source, as submitted by the Department in accordance with 310 CMR 7.32(5)(b)3., for the control period in the year of the applicable deadline for recordation under this paragraph.

4. On or before December 1, 2009 and December 1 of each year thereafter, the Administrator will record in the CAIR NO_x Ozone Season Allowance Tracking System account the CAIR NO_x Ozone Season allowances allocated from the Public Benefit Set-aside, as submitted by the Department in accordance with 310 CMR 7.32(5)(b)3., for the control period in the year of the applicable deadline for recordation under this paragraph.

5. Serial numbers for allocated CAIR NO_x Ozone Season allowances. When recording the allocation of CAIR NO_x Ozone Season allowances for a CAIR NO_x Ozone Season unit in a compliance account, the Administrator will assign each CAIR NO_x Ozone Season allowance a unique identification number that will include digits identifying the year of the control period for which the CAIR NO_x Ozone Season allowance is allocated.

(e) Compliance with CAIR NO_x emissions limitation.

1. Allowance transfer deadline. The CAIR NO_x Ozone Season allowances are available to be deducted for compliance with a source's CAIR NO_x

Ozone Season emissions limitation for a control period in a given calendar year only if the CAIR NO_x Ozone Season allowances:

a. Were allocated for the control period in the year or a prior year; and

b. Are held in the compliance account as of the allowance transfer deadline for the control period or are transferred into the compliance account by a CAIR NO_x Ozone Season allowance transfer correctly submitted for recordation 310 CMR 7.32(7)(a) and (b) by the allowance transfer deadline for the control period.

2. *Deductions for compliance.* Following the recordation, in accordance with (7)(b), of CAIR NO_x Ozone Season allowance transfers submitted for recordation in a source's compliance account by the allowance transfer deadline for a control period, the Administrator will deduct from the compliance account CAIR NO_x Ozone Season allowances available under 310 CMR 7.32(6)(e)1. in order to determine whether the source meets the CAIR NO_x Ozone Season emissions limitation for the control period, as follows:

a. Until the amount of CAIR NO_x Ozone Season allowances deducted equals the number of tons of total nitrogen oxides emissions, determined in accordance with 310 CMR 7.32(8) of this section, from all CAIR NO_x Ozone Season units at the source for the control period; or

b. If there are insufficient CAIR NO_x Ozone Season allowances to complete the deductions in 310 CMR 7.32(6)(e)2.a., until no more CAIR NO_x Ozone Season allowances available under 310 CMR 7.32(6)(e)1. remain in the compliance account.

3.

a. Identification of CAIR NO_x Ozone Season allowances by serial number. The CAIR authorized account representative for a source's compliance account may request that specific CAIR NO_x Ozone Season allowances, identified by serial number, in the compliance account be deducted for emissions or excess emissions for a control period in accordance with 310 CMR 7.32(6)(e)2. or 4. Such request shall be submitted to the Administrator by the allowance transfer deadline for the control period and include, in a format prescribed by the Administrator, the identification of the CAIR NO_x Ozone Season source and the appropriate serial numbers.

b. First-in, first-out. The Administrator will deduct CAIR NO_x Ozone Season allowances under 310 CMR 7.32(6)(e)2. or 4. from the source's compliance account, in the absence of an identification or in the case of a partial identification of CAIR NO_x Ozone Season allowances by serial number under 310 CMR 7.32(6)(e)3.a., on a first-in, first-out (FIFO) accounting basis in the following order:

i. Any CAIR NO_x Ozone Season allowances that were allocated to the units at the source, in the order of recordation; and then

ii. Any CAIR NO_x Ozone Season allowances that were allocated to any entity and transferred and recorded in the compliance account pursuant to 310 CMR 7.32(7), in the order of recordation.

4. Deductions for excess emissions.

a. After making the deductions for compliance under 310 CMR 7.32(6)(e)2. for a control period in a calendar year in which the CAIR NO_x Ozone Season source has excess emissions, the Administrator will deduct from the source's compliance account an amount of CAIR NO_x Ozone Season allowances, allocated for the control period in the immediately following calendar year, equal to 3 times the number of tons of the source's excess emissions.

b. Any allowance deduction required under 310 CMR 7.32(6)(e)4.a. shall not affect the liability of the owners and operators of the CAIR NO_x Ozone Season source or the CAIR NO_x Ozone Season units at the source for any fine, penalty, or assessment, or their obligation to comply with any other remedy, for the same violations, as ordered under the Clean Air Act or applicable State law.

5. Recordation of deductions. The Administrator will record in the appropriate compliance account all deductions from such an account under 310 CMR 7.32(6)(e)2. or 4.

6. Administrator's action on submissions.

a. The Administrator may review and conduct independent audits concerning any submission under the CAIR NO_x Ozone Season Trading Program and make appropriate adjustments of the information in the submissions.

b. The Administrator may deduct CAIR NO_x Ozone Season allowances from or transfer CAIR NO_x Ozone Season allowances to a source's compliance account based on the information in the submissions, as adjusted under 6.a. of this division, and record such deductions and transfers.

(f) Banking.

1. CAIR NO_x Ozone Season allowances may be banked for future use or transfer in a compliance account or a general account in accordance with 310 CMR 7.32(6)(f)1.

2. Any CAIR NO_x Ozone Season allowance that is held in a compliance account or a general account will remain in such account unless and until the CAIR NO_x Ozone Season allowance is deducted or transferred under 310 CMR 7.32(6)(e), (6)(g), or (7).

(g) Account error. The Administrator may, at his or her sole discretion and on his or her own motion, correct any error in any CAIR NO_x Ozone Season Allowance Tracking System account. Within 10 business days of making such correction, the Administrator will notify the CAIR authorized account representative for the account.

(h) Closing of general accounts.

1. The CAIR authorized account representative of a general account may submit to the Administrator a request to close the account, which shall include a correctly submitted allowance transfer under 310 CMR 7.32(7)(a) and (b) for any CAIR NO_x Ozone Season allowances in the account to one or more other CAIR NO_x Ozone Season Allowance Tracking System accounts.

2. If a general account has no allowance transfers in or out of the account for a 12-month period or longer and does not contain any CAIR NO_x Ozone Season allowances, the Administrator may notify the CAIR authorized account representative for the account that the account will be closed following 20 business days after the notice is sent. The account will be closed after the 20-day period unless, before the end of the 20-day period, the Administrator receives a correctly submitted transfer of CAIR NO_x Ozone Season allowances into the account under 310 CMR 7.32(7)(a) and (b) or a statement submitted by the CAIR authorized account representative demonstrating to the satisfaction of the Administrator good cause as to why the account should not be closed.

(7) CAIR NO_x Ozone Season Allowance Transfers.

(a) Submission of CAIR NO_x Ozone Season allowance transfers. A CAIR authorized account representative seeking recordation of a CAIR NO_x Ozone Season allowance transfer shall submit the transfer to the Administrator. To be considered correctly submitted, the CAIR NO_x Ozone Season allowance transfer shall include the following elements, in a format specified by the Administrator:

1. The account numbers for both the transferor and transferee accounts;
2. The serial number of each CAIR NO_x Ozone Season allowance that is in the transferor account and is to be transferred; and
3. The name and signature of the CAIR authorized account representative of the transferor account and the date signed.

(b) EPA recordation.

1. Within 5 business days (except as provided in subdivision 2. of this division) of receiving a CAIR NO_x Ozone Season allowance transfer, the Administrator will record a CAIR NO_x Ozone Season allowance transfer by moving each CAIR NO_x Ozone Season allowance from the transferor account to the transferee account as specified by the request, provided that:
   a. The transfer is correctly submitted under 310 CMR 7.32(7)(a); and
   b. The transferor account includes each CAIR NO_x Ozone Season allowance identified by serial number in the transfer.
2. A CAIR NO_x Ozone Season allowance transfer that is submitted for recordation after the allowance transfer deadline for a control period and that includes any CAIR NO_x Ozone Season allowances allocated for any control period before such allowance transfer deadline will not be recorded until after the Administrator completes the deductions under 310 CMR 7.32(6)(e) for the control period immediately before such allowance transfer deadline.
3. Where a CAIR NO_x Ozone Season allowance transfer submitted for recordation fails to meet the requirements of 310 CMR 7.32(7)(b)1., the Administrator will not record such transfer.

(c) Notification.

1. Notification of recordation. Within 5 business days of recordation of a CAIR NO_x Ozone Season allowance transfer under 310 CMR 7.32(7)(b), the Administrator will notify the CAIR authorized account representatives of both the transferor and transferee accounts.

2. Notification of non-recordation. Within 10 business days of receipt of a CAIR NO_x Ozone Season allowance transfer that fails to meet the requirements of 310 CMR 7.32(7)(b)1., the Administrator will notify the CAIR authorized account representatives of both accounts subject to the transfer of:

a. A decision not to record the transfer, and

b. The reasons for such nonrecordation.

3. Nothing in this section shall preclude the submission of a CAIR NO_x Ozone Season allowance transfer for recordation following notification of non-recordation.

(8) Monitoring and Reporting.

(a) General requirements. The owners and operators, and to the extent applicable, the CAIR designated representative, of a CAIR NO_x Ozone Season unit, shall comply with the monitoring, recordkeeping, and reporting requirements as provided in this subpart and in subpart H of 40 CFR Part 75. For purposes of complying with such requirements, the definitions in 310 CMR 7.32(1)(b) and in 40 CFR 72.2 shall apply, and the terms ''affected unit,'' ''designated representative,'' and ''continuous emission monitoring system'' (or ''CEMS'') in 40 CFR Part 75 shall be deemed to refer to the terms ''CAIR NO_x Ozone Season unit,'' ''CAIR designated representative,'' and ''continuous emission monitoring system'' (or ''CEMS'') respectively, as defined in 310 CMR 7.32(1)(b). The owner or operator of a unit that is not a CAIR NO_x Ozone Season unit but that is monitored under 40 CFR 75.72(b)(2)(ii) shall comply with the same monitoring, recordkeeping, and reporting requirements as a CAIR NO_x Ozone Season unit.

1. *Requirements for installation, certification, and data accounting.* The owner or operator of each CAIR NO_x Ozone Season unit shall:

a. Install all monitoring systems required under this subpart for monitoring NO_x mass emissions and individual unit heat input (including all systems required to monitor NO_x emission rate, NO_x concentration, stack gas moisture content, stack gas flow rate, CO2 or O2 concentration, and fuel flow rate, as applicable, in accordance with 40 CFR 75.71 and 75.72);

b. Successfully complete all certification tests required under 310 CMR 7.32(8)(b) and meet all other requirements of this subpart and 40 CFR Part 75 applicable to the monitoring systems under 310 CMR 7.32(8)(a)1.a.; and

c. Record, report, and quality-assure the data from the monitoring systems under 310 CMR 7.32(8)(a)1.a. of this division.

2. *Compliance deadlines.* Except as provided in 310 CMR 7.32(8)(e), the owner or operator shall meet the monitoring system certification and other requirements of 310 CMR 7.32(8)(a)1.a. and b. on or before the following dates. Except as provided in subdivision 310 CMR 7.32(8)(a)5., the owner or operator shall record, report, and quality-assure the data from the monitoring systems under 310 CMR 7.32(8)(a)1.a. on and after the following dates.

a. For the owner or operator of a CAIR NO_x Ozone Season unit that commences commercial operation before July 1, 2007, on or before May 1, 2008.

b. For the owner or operator of a CAIR NO_x Ozone Season unit that commences commercial operation on or after July 1, 2007 and that reports on an annual basis under 310 CMR 7.32(8)(e)4., by the later of the following dates:

i. 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which the unit commences commercial operation; or

ii. May 1, 2008.

c. For the owner or operator of a CAIR NO_x Ozone Season unit that commences commercial operation on or after July 1, 2007 and that reports on a control period basis under 310 CMR 7.32(8)(e)4.b.ii., by the later of the following dates:

i. 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which the unit commences commercial operation; or

ii. If the compliance date under 310 CMR 7.32(8)(a)2.c.i. is not during a control period, May 1 immediately following the compliance date under 310 CMR 7.32(8)(a)2.c.i.

d. For the owner or operator of a CAIR NO_x Ozone Season unit for which construction of a new stack or flue or installation of add-on NO_x emission controls is completed after the applicable deadline under 310 CMR 7.32(8)(a)2.a., 2.b., 2.f., or 2.g. and that reports on an annual basis under 310 CMR 7.32(8)(e)4., by 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which emissions first exit to the atmosphere through the new stack or flue or add-on NO_x emissions controls.

e. For the owner or operator of a CAIR NO_x Ozone Season unit for which construction of a new stack or flue or installation of add-on NO_x emission controls is completed after the applicable deadline under 310 CMR 7.32(8)(a)2.a., 2.c., 2.f., or 2.g. and that reports on a control period basis under 310 CMR 7.32(8)(e)4.b.ii, by the later of the following dates:

i. 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which emissions first exit to the atmosphere through the new stack or flue or add-on NO_x emissions controls; or

ii. If the compliance date under 310 CMR 7.32(8)(a)2.e.i. is not during a control period, May 1 immediately following the compliance date under 310 CMR 7.32(8)(a)2.e.i.

3. *Reporting data*. The owner or operator of a CAIR NO_x Ozone Season unit that does not meet the applicable compliance date set forth in 310 CMR 7.32(8)(a)2. for any monitoring system under 310 CMR 7.32(8)(a)1.a. shall, for each such monitoring system, determine, record, and report maximum potential (or, as appropriate, minimum potential) values for NO_x concentration, NO_x emission rate, stack gas flow rate, stack gas moisture content, fuel flow rate, and any other parameters required to determine NO_x

mass emissions and heat input in accordance with 40 CFR 75.31(b)(2) or (c)(3), section 2.4 of appendix D to 40 CFR Part 75, or section 2.5 of appendix E to 40 CFR Part 75, as applicable.

4. *Prohibitions.*

a. No owner or operator of a CAIR NO_x Ozone Season unit shall use any alternative monitoring system, alternative reference method, or any other alternative to any requirement of this subpart without having obtained prior written approval in accordance with 310 CMR 7.32(8)(f).

b. No owner or operator of a CAIR NO_x Ozone Season unit shall operate the unit so as to discharge, or allow to be discharged, NO_x emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of this subpart and 40 CFR Part 75.

c. No owner or operator of a CAIR NO_x Ozone Season unit shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording NO_x mass emissions discharged into the atmosphere or heat input, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this subpart and 40 CFR Part 75.

d. No owner or operator of a CAIR NO_x Ozone Season unit shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved monitoring system under this subpart, except under any one of the following circumstances:

i. During the period that the unit is covered by an exemption under 310 CMR 7.32(1)(e) that is in effect;

ii. The owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions of this subpart and 40 CFR Part 75, by the Department for use at that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or

iii. The CAIR designated representative submits notification of the date of certification testing of a replacement monitoring system for the retired or discontinued monitoring system in accordance with 310 CMR 7.32(8)(b)4.c.i.

5. *Long-term cold storage.* The owner or operator of a CAIR NO_x Ozone Season unit is subject to the applicable provisions of 40 CFR Part 75 concerning units in long-term cold storage.

(b) Initial certification and recertification procedures.

1. The owner or operator of a CAIR NO_x Ozone Season unit shall be exempt from the initial certification requirements of this section for a monitoring system under 310 CMR 7.32(8)(a)1.a. if the following conditions are met:

a. The monitoring system has been previously certified in accordance with 40 CFR Part 75; and

b. The applicable quality-assurance and quality-control requirements of 40 CFR 75.21 and appendix B, appendix D, and appendix E to 40 CFR Part 75 are fully met for the certified monitoring system described in paragraph 310 CMR 7.32(8)(b)1.a.

2. The recertification provisions of this section shall apply to a monitoring system under 310 CMR 7.32(8)(a)1.a. exempt from initial certification requirements under 310 CMR 7.32(8)(b)1.

3. If the Administrator has previously approved a petition under 40 CFR 75.17(a) or (b) for apportioning the NO_x emission rate measured in a common stack or a petition under 40 CFR 75.66 for an alternative to a requirement in 40 CFR 75.12 or 75.17, the CAIR designated representative shall resubmit the petition to the Administrator under 310 CMR 7.32(8)(f)1. to determine whether the approval applies under the CAIR NO_x Ozone Season Trading Program.

4. Except as provided in 310 CMR 7.32(8)(b)1., the owner or operator of a CAIR NO_x Ozone Season unit shall comply with the following initial certification and recertification procedures for a continuous monitoring system (i.e., a continuous emission monitoring system and an excepted monitoring system under appendices D and E to 40 CFR Part 75) under 310 CMR 7.32(8)(a)1.a. The owner or operator of a unit that qualifies to use the low mass emissions excepted monitoring methodology under 40 CFR 75.19 or that qualifies to use an alternative monitoring system under subpart E of 40 CFR Part 75 shall comply with the procedures in 310 CMR 7.32(8)(b)5. or 6. respectively.

a. Requirements for initial certification. The owner or operator shall ensure that each continuous monitoring system under 310 CMR 7.32(8)(a)1.a. (including the automated data acquisition and handling system) successfully completes all of the initial certification testing required under 40 CFR 75.20 by the applicable deadline in 310 CMR 7.32(8)(a)2. In addition, whenever the owner or operator installs a monitoring system to meet the requirements of this subpart in a location where no such monitoring system was previously installed, initial certification in accordance with 40 CFR 75.20 is required.

b. Requirements for recertification. Whenever the owner or operator makes a replacement, modification, or change in any certified continuous emission monitoring system under 310 CMR 7.32(8)(a)1.a. that may significantly affect the ability of the system to accurately measure or record NO_x mass emissions or heat input rate or to meet the quality assurance and quality-control requirements of 40 CFR 75.21 or appendix B to 40 CFR Part 75, the owner or operator shall recertify the monitoring system in accordance with 40 CFR 75.20(b). Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that may significantly change the stack flow or concentration profile, the owner or operator shall recertify each continuous emission monitoring system whose

accuracy is potentially affected by the change, in accordance with 40 CFR 75.20(b). Examples of changes to a continuous emission monitoring system that require recertification include: Replacement of the analyzer, complete replacement of an existing continuous emission monitoring system, or change in location or orientation of the sampling probe or site. Any fuel flowmeter systems, and any excepted NO_x monitoring system under appendix E to 40 CFR Part 75, under 310 CMR 7.32(8)(a)1.a. are subject to the recertification requirements in 40 CFR 75.20(g)(6).

c. Approval process for initial certification and recertification. Paragraphs 310 CMR 7.32(8)(b)4.c.i. through iv. apply to both initial certification and recertification of a continuous monitoring system under 310 CMR 7.32(8)(a)1.a. For recertifications, replace the words ''certification'' and ''initial certification'' with the word ''recertification'', replace the word ''certified'' with the word ''recertified,'' and follow the procedures in 40 CFR 75.20(b)(5) and (g)(7) in lieu of the procedures in paragraph 310 CMR 7.32(8)(b)4.c.v.

i. Notification of certification. The CAIR designated representative shall submit to the Department, the appropriate EPA Regional Office, and the Administrator written notice of the dates of certification testing, in accordance with 310 CMR 7.32(8)(d).

ii. Certification application. The CAIR designated representative shall submit to the Department a certification application for each monitoring system. A complete certification application shall include the information specified in 40 CFR 75.63.

iii. Provisional certification date. The provisional certification date for a monitoring system shall be determined in accordance with 40 CFR 75.20(a)(3). A provisionally certified monitoring system may be used under the CAIR NO_x Ozone Season Trading Program for a period not to exceed 120 days after receipt by the Department of the complete certification application for the monitoring system under 310 CMR 7.32(8)(b)4.c.ii. Data measured and recorded by the provisionally certified monitoring system, in accordance with the requirements of 40 CFR Part 75, will be considered valid quality-assured data (retroactive to the date and time of provisional certification), provided that the Department does not invalidate the provisional certification by issuing a notice of disapproval within 120 days of the date of receipt of the complete certification application by the Department.

iv. Certification application approval process. The Department will issue a written notice of approval or disapproval of the certification application to the owner or operator within 120 days of receipt of the complete certification application under 310 CMR 7.32(8)(b)4.c.ii. In the event the Department does not issue such a notice within such 120-day period, each monitoring system that meets the applicable performance requirements of 40 CFR Part 75 and is included in the certification application will be deemed certified for use under the CAIR NO_x Ozone Season Trading Program.

(i) Approval notice. If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of 40 CFR Part 75, then the Department will issue a written notice of approval of the certification application within 120 days of receipt.

(ii) Incomplete application notice. If the certification application is not complete, then the Department will issue a written notice of incompleteness that sets a reasonable date by which the CAIR designated representative must submit the additional information required to complete the certification application. If the CAIR designated representative does not comply with the notice of incompleteness by the specified date, then the Department may issue a notice of disapproval under 310 CMR 7.32(8)(b)4.c.iv.(iii). The 120-day review period shall not begin before receipt of a complete certification application.

(iii) Disapproval notice. If the certification application shows that any monitoring system does not meet the performance requirements of 40 CFR Part 75 or if the certification application is incomplete and the requirement for disapproval under 310 CMR 7.32(8)(b)4.c.iv.(ii) is met, then the Department will issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated by the Department and the data measured and recorded by each uncertified monitoring system shall not be considered valid quality assured data beginning with the date and hour of provisional certification (as defined under 40 CFR 75.20(a)(3)). The owner or operator shall follow the procedures for loss of certification in 310 CMR 7.32(8)(b)4.c.v. for each monitoring system that is disapproved for initial certification.

(iv) Audit decertification. The Department may issue a notice of disapproval of the certification status of a monitor in accordance with 310 CMR 7.32(8)(c)2.

v. Procedures for loss of certification. If the Department issues a notice of disapproval of a certification application under 310 CMR 7.32(8)(b)4.c.iv.(iii) or a notice of disapproval of certification status under 310 CMR 7.32(8)(b)4.c.iv.(iv), then:

(i) The owner or operator shall substitute the following values, for each disapproved monitoring system, for each hour of unit operation during the period of invalid data specified under 40 CFR 75.20(a)(4)(iii), § 75.20(g)(7), or 75.21(e) and continuing until the applicable date and hour specified under 40 CFR 75.20(a)(5)(i) or (g)(7):

-1. For a disapproved NO_x emission rate (i.e., NO_x-diluent) system, the maximum potential NO_x emission rate, as defined in 40 CFR 72.2.

-2. For a disapproved NO_x pollutant concentration monitor and disapproved flow monitor, respectively, the maximum potential concentration of NO_x and the maximum potential flow rate, as defined in sections 2.1.2.1 and 2.1.4.1 of appendix A to 40 CFR Part 75.

-3. For a disapproved moisture monitoring system and disapproved diluent gas monitoring system, respectively, the minimum potential moisture percentage and either the maximum potential CO2 concentration or the minimum potential O2 concentration (as applicable), as defined in sections 2.1.5, 2.1.3.1, and 2.1.3.2 of appendix A to 40 CFR Part 75.

-4. For a disapproved fuel flowmeter system, the maximum potential fuel flow rate, as defined in section 2.4.2.1 of appendix D to 40 CFR Part 75.

-5. For a disapproved excepted NO_x monitoring system under appendix E to 40 CFR Part 75, the fuel-specific maximum potential NO_x emission rate, as defined in 40 CFR 72.2.

(ii) The CAIR designated representative shall submit a notification of certification retest dates and a new certification application in accordance with 310 CMR 7.32(8)(b)4.c.i. and ii.

(iii) The owner or operator shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the Department's notice of disapproval, no later than 30 unit operating days after the date of issuance of the notice of disapproval.

5. Initial certification and recertification procedures for units using the low mass emission excepted methodology under 40 CFR 75.19. The owner or operator of a unit qualified to use the low mass emissions (LME) excepted methodology under 40 CFR 75.19 shall meet the applicable certification and recertification requirements in 40 CFR 75.19(a)(2) and 75.20(h). If the owner or operator of such a unit elects to certify a fuel flowmeter system for heat input determination, the owner or operator shall also meet the certification and recertification requirements in 40 CFR 75.20(g).

6. Certification/recertification procedures for alternative monitoring systems. The CAIR designated representative of each unit for which the owner or operator intends to use an alternative monitoring system approved by the Administrator and, if applicable, the Department under subpart E of 40 CFR Part 75 shall comply with the applicable notification and application procedures of 40 CFR 75.20(f).

(c) Out of control periods.

1. Whenever any monitoring system fails to meet the quality-assurance and quality-control requirements or data validation requirements of 40 CFR 75, data shall be substituted using the applicable missing data procedures in subpart D or subpart H of, or appendix D or appendix E to, 40 CFR Part 75.

2. *Audit decertification.* Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any monitoring system should not have been certified or recertified because it did not meet a particular performance specification or other requirement under 310 CMR 7.32(8)(b) or the applicable provisions of 40 CFR Part 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the Department will issue a notice of disapproval of the certification status of such monitoring system. For the purposes of this paragraph, an audit shall be either a field audit or an audit of any information submitted to the Department. By issuing the notice of disapproval, the Department revokes prospectively the certification status of the monitoring system. The data measured and recorded by the monitoring system shall not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator shall follow the applicable initial certification or recertification procedures in 310 CMR 7.32(8)(b) for each disapproved monitoring system.

(d) Notifications. The CAIR designated representative for a CAIR NO_x Ozone Season unit shall submit written notice to the Department and the Administrator in accordance with 40 CFR 75.61.

(e) Recordkeeping and reporting.

1. *General provisions.* The CAIR designated representative shall comply with all recordkeeping and reporting requirements in this section, the applicable recordkeeping and reporting requirements under 40 CFR 75.73, and the requirements of 310 CMR 7.32(2)(a)5.a.

2. *Monitoring plans.* The owner or operator of a CAIR NO_x Ozone Season unit shall comply with requirements of 40 CFR 75.73(c) and (e).

3. *Certification applications.* The CAIR designated representative shall submit an application to the Department within 45 days after completing all initial certification or recertification tests required under 310 CMR 7.32(8)(b), including the information required under 40 CFR 75.63.

4. *Quarterly reports.* The CAIR designated representative shall submit quarterly reports, as follows:

a. If the CAIR NO_x Ozone Season unit is subject to an Acid Rain emissions limitation or a CAIR NO_x emissions limitation or monitors NOx emissions using CEMS or if the owner or operator of such unit chooses to report on an annual basis under this subpart, the CAIR designated representative shall meet the requirements of subpart H of 40 CFR Part 75 (concerning monitoring of NO_x mass emissions) for such unit for the entire year and shall report the NO_x mass emissions data and heat input data for such unit, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter beginning with:

i. For a unit that commences commercial operation before July 1, 2007, the calendar quarter covering May 1, 2008 through June 30, 2008; and

ii. For a unit that commences commercial operation on or after July 1, 2007, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under 310 CMR 7.32(8)(a)2., unless that quarter is the third or fourth quarter of 2007 or the first quarter of 2008, in which case reporting shall commence in the quarter covering May 1, 2008 through June 30, 2008.

b. If the CAIR NO_x Ozone Season unit is not subject to an Acid Rain emissions limitation or a CAIR NO_x emissions limitation, and does not monitor NOx emissions using CEMS, then the CAIR designated representative shall either:

i. Meet the requirements of subpart H of 40 CFR Part 75 (concerning monitoring of NO_x mass emissions) for such unit for the entire year and report the NO_x mass emissions data and heat input data for such unit in accordance with 310 CMR 7.32(8)(e)4.a.; or

ii. Meet the requirements of subpart H of 40 CFR Part 75 for the control period (including the requirements in 40 CFR 75.74(c)) and report NO_x mass emissions data and heat input data (including the data described in 40 CFR 75.74(c)(6)) for such unit only for the control period of each year and report, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter beginning with:

(i) For a unit that commences commercial operation before July 1, 2007, the calendar quarter covering May 1, 2008 through June 30, 2008; and

(ii) For a unit that commences commercial operation on or after July 1, 2007, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under 310 CMR 7.32(8)(a)2., unless that date is not during a control period, in which case reporting shall commence in the quarter that includes May 1 through June 30 of the first control period after such date.

c. The CAIR designated representative shall submit each quarterly report to the Administrator within 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in 40 CFR 75.73(f).

d. For CAIR NO_x Ozone Season units that are also subject to an Acid Rain emissions limitation or the CAIR NO_x Annual Trading Program, CAIR SO_2 Trading Program, or Hg Budget Trading Program, or that monitor NO_x emissions with CEMS, quarterly reports shall include the applicable data and information required by subparts F through I of 40 CFR Part 75 as applicable, in addition to the NO_x mass emission data, heat input data, and other information required by 310 CMR 7.32(8).

5. Compliance certification. The CAIR designated representative shall submit to the Administrator a compliance certification (in a format prescribed by the Administrator) in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring

that all of the unit's emissions are correctly and fully monitored. The certification shall state that:

a. The monitoring data submitted were recorded in accordance with the applicable requirements of this subpart and 40 CFR Part 75, including the quality assurance procedures and specifications;

b. For a unit with add-on NO_x emission controls and for all hours where NO_x data are substituted in accordance with 40 CFR 75.34(a)(1), the add-on emission controls were operating within the range of parameters listed in the quality assurance/quality control program under appendix B to 40 CFR Part 75 and the substitute data values do not systematically underestimate NO_x emissions; and

c. For a unit that is reporting on a control period basis under 310 CMR 7.32(8)(e)4.b.ii., the NO_x emission rate and NO_x concentration values substituted for missing data under subpart D of 40 CFR Part 75 are calculated using only values from a control period and do not systematically underestimate NO_x emissions.

(f) Petitions.

1. Except as provided in 310 CMR 7.32(8)(f)2.b., the CAIR designated representative of a CAIR NO_x Ozone Season unit that is subject to an Acid Rain emissions limitation may submit a petition under 40 CFR 75.66 to the Administrator requesting approval to apply an alternative to any requirement of this subpart. Application of an alternative to any requirement of this subpart is in accordance with this subpart only to the extent that the petition is approved in writing by the Administrator, in consultation with the Department.

2.

a. The CAIR designated representative of a CAIR NO_x Ozone Season unit that is not subject to an Acid Rain emissions limitation may submit a petition under 40 CFR 75.66 to the Department and the Administrator requesting approval to apply an alternative to any requirement of this subpart. Application of an alternative to any requirement of this subpart is in accordance with this subpart only to the extent that the petition is approved in writing by both the Department and the Administrator.

b. The CAIR designated representative of a CAIR NO_x Ozone Season unit that is subject to an Acid Rain emissions limitation may submit a petition under 40 CFR 75.66 to the Department and the Administrator requesting approval to apply an alternative to a requirement concerning any additional continuous emission monitoring system required under 40 CFR 75.72. Application of an alternative to any such requirement is in accordance with this subpart only to the extent that the petition is approved in writing by both the Department and the Administrator.

(9) Monitoring and Recordkeeping for Energy Output

(a) Initial certification. The CAIR designated representative shall submit a certification stating that the output monitoring system meets one of the following requirements. This certification may be submitted with the certification application required under 310 CMR 7.32(8)(b)4.c.ii.

1. Billing meters. The billing meter shall record the electric or thermal output. Any electric or thermal output values that the facility reports shall be the same as the values used in billing for the output. Any output measurement equipment used as a billing meter in commercial transactions requires no additional certification or testing.

2. Non-billing meters. For non-billing meters and systems that include a mixture of billing meters and non-billing meters, the output monitoring system shall meet the accuracy criteria in 310 CMR 7.32(9)(a)2.a. or b., whichever is less stringent.

a. System approach to accuracy. The system approach to accuracy shall include a determination of how the system accuracy of within less than or equal to 10.0% is achieved using the individual components in the system and shall include data loggers and any wattmeters used to calculate the final net electric output data and/or any flowmeters for steam or condensate, temperature measurement devices, absolute pressure measurement devices, and differential pressure devices used for measuring thermal energy.

b. Component approach to accuracy. If testing a piece of output measurement equipment shows that the output readings are not accurate to within less than or equal to 3.0% of the full scale value, then the equipment shall be repaired or replaced to meet that requirement. Data shall remain invalid until the output measurement equipment passes an accuracy test or is replaced with another piece of equipment that passes the accuracy test.

(b) Ongoing QA/QC. For non-billing meters, the operator shall perform the following ongoing quality assurance/quality control activities:

1. Certain types of equipment such as potential transformers, current transformers and the primary element of an orifice plate only require an initial certification of calibration and do not require periodic recalibration unless the equipment is physically changed. However, the pressure and temperature transmitters accompanying an orifice plate require periodic retesting. For other types of equipment, either recalibrate or re-verify the meter accuracy at least once every two years (i.e., every eight calendar quarters), unless a consensus standard allows for less frequent calibrations or accuracy tests. For non-billing meters, the output monitoring system shall either meet an accuracy of within less than or equal to 10.0% of the reference value, or each component monitor for the output system shall meet an accuracy of within less than or equal to 3.0% of the full scale value, whichever is less stringent. If testing a piece of output measurement equipment shows that the output readings are not accurate to within less than or equal to 3.0% of the full scale value, then the equipment shall be repaired or replaced to meet that requirement.

2. Out-of-control periods. If testing a piece of output measurement equipment shows that the output readings are not accurate to the certification value, data remain invalid until the output measurement equipment passes an accuracy test or is replaced with another piece of equipment that passes the accuracy test. All invalid data shall be replaced by either zero or an output

value that is likely to be lower than a measured value and that is approved as part of the monitoring plan required under 310 CMR 7.32(3)(c)4.

(c) Recordkeeping and reporting.

1. General provisions. The CAIR designated representative shall comply with all the following recordkeeping and reporting requirements.

2. Recordkeeping. Facilities shall retain data used to monitor, determine, or calculate energy output for ten years.

3. Output reports. The output report shall include unit level net electric output (in MWh), all useful steam output (in MMBtu) and a certification statement from the CAIR designated representative stating the following, "I am authorized to make this submission on behalf of the owners and operators of the CAIR NO_x Ozone Season source or CAIR NO_x Ozone Season unit for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment." Data shall be submitted both electronically and in hardcopy. The CAIR designated representative for a CAIR NO_x Ozone Season unit shall submit to the Department ozone season output reports on or before December 1, 2009 and December 1 of each year thereafter, for the immediately preceding ozone season.